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# The National Locksmith®

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LOCKSMITHING

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June 2002  
Volume 73  
No. 6  
\$7.00

**TCL-1  
puts the pedal  
to the metal!**



**Race  
to your  
distributor!**



## On The Cover...



Everyone said it wouldn't be done... no one will be able to incorporate more than one manufacturer's transponder encryption info in one unit. Well, welcome to the TCL-1.

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# COMMENTARY



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## Locksmiths In The News

Locksmiths have been appearing lately in the news. Here is a recap of some of the interesting stories involving fellow 'smiths.

### One locksmith reopens after 9/11

The Alliance for Downtown New York estimates 100,000 of the 370,000 jobs downtown are gone, and 11,000 businesses have closed or moved.

Grants and loans have boosted other businesses, like Trade Center Locksmith, which reopened Oct. 25. Owner Assad Mirshamsi said he was in shock at first, wondering if he would make it. Sales are only 65 percent of pre-Sept. 11 levels, he said, but "the business is surviving, with the help that we are getting."

*Marc comments: Out of the tragedy of 9/11, survivors try to rebuild their lives. Clearly, no one can restore the dead which is the most terrible aspect. But people are also hurt when businesses they depend on are ruined. We wish Assad the best in rebuilding his livelihood.*

### Another 9/11 Locksmith faces losses

NEW YORK, 9:19 a.m. EDT April 30, 2002 - At Steamers Landing Restaurant just west of ground zero, which rescue workers turned into a command center, cases of champagne, tables and chairs were gone when owner Jan Fried was allowed back two weeks after the attacks.

"My missing furniture and my missing wine is not part of 9/11," said Fried, owner of Steamers Landing. "It's what happened after 9/11."

Seth Pehr's locksmith shop in the World Trade Center concourse was so secure after Sept. 11 that he couldn't get to it himself for days. When he did, he said \$11,000 cash was gone.

"Was it somebody with credentials? Most probably," Pehr said.

While none of the owners know which credentialed workers might have taken property – and two people posing as rescuers have already been convicted of looting – many are dismayed.

The mayor says the City will not compensate looting victims. But some owners say in places where rescuers took over businesses, the government should pay for losses. And while the insurance industry has pledged to

pay legitimate claims, many business owners say claims are in fact being denied

*Marc comments: It seems to me that owners like Seth who were barred by the government from entering their premises should be compensated by the government for looting losses. That's because those losses came about while the government had custody and control of the entire area. If nothing else, using their regulatory muscle, the city and federal governments should lean on insurance companies to pay legitimate claims.*

### Did you know California locksmiths were licensed way before electricians?

SACRAMENTO, Calif.-(BUSINESS WIRE)-May 2, 2002-Assembly Bill 1087 (AB 1087), which expands and facilitates implementation of previously approved legislation requiring California electricians to be certified by the Department of Industrial Relations, has passed the Senate.

Individual electricians currently do not have to be certified to perform electrical work in California, unlike many other professions, such as manicurists, acupuncturists, beauticians, locksmiths and even boxers, who need to be licensed to practice. California will join more than 30 other states that already have state-mandated electrician certification guidelines in place when mandatory certification goes into effect on January 1, 2005.

*Marc comments: Can you even BELIEVE that locksmiths were forced to be licensed while electricians were not? I'm shaking my head over that one.*

*Marc Goldberg*



**Have questions? Want free technical help?**  
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**Marc Goldberg**  
Publisher



# Mango's Message

**L**ast year I did an editorial titled "On Board Diagnostic Legislation" that covered the California Legislature passage of "Senate Bill 1146." The Bill required the adoption of regulations that would require motor vehicle manufacturers to take specified actions to make available information relating to motor vehicle emissions monitoring and testing, and On Board Diagnostic Systems.

SB 1146 was lobbied in part by such associations as the Automotive Aftermarket Industry Association, the California Automobile Wholesalers Association, and the Automotive Parts Rebuilders Association.

The primary thrust of SB 1146 applied to California pollution and emission controls, meaning you were only privy to proprietary OEM information if you were servicing the emission control system or something that could affect it. Making a key did not necessarily justify access to proprietary information.

This Bill is only applicable to California automotive service providers, but at the time I stated that what legislation occurs in California, eventually sweeps across the country in one form or another. Well, it has!

In the U.S. House of Representatives, there is currently a Bill pending that if passed, would pave the way for all service providers needing access to proprietary OEM On Board Diagnostic (OBD) information, whether you are working on the emission control system or not.

Titled the "Motor Vehicle Owners' Right to Repair Act of 2001" in its current form, (H.R. 2735) would make proprietary OEM On Board Diagnostic information available to all vehicle service providers. This Bill has a few intriguing aspects, which the California legislation didn't. First, the Bill is not tied to the emission control system regarding servicing or diagnostics. Second, it is a Federal Bill, meaning it would impact the entire country.

H.R. 2735 reads as follows:

#### **The Bill Introduced in the House**

To protect the rights of American consumers to diagnose, service, and repair motor vehicles purchased in the United States, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

#### **SECTION 1. SHORT TITLE.**

This Act may be cited as the 'Motor Vehicle Owners' Right to Repair Act of 2001 '.

#### **SEC. 2. FINDINGS AND PURPOSES.**

(a) FINDINGS - The Congress finds the following:

## Vehicle Owners' Right to Choose

(1) The ability to diagnose, service, and repair a motor vehicle in a timely, reliable, and affordable manner is essential to the safety and well-being of automotive consumers in the United States.

(2) Consumers are entitled to choose among competing repair facilities for the convenient, reliable, and affordable repair of their motor vehicles.

(3) Increased competition among repair facilities will benefit vehicle owners in the United States.

(4) Computers of various kinds are increasingly being used in motor vehicle systems, such as pollution control, transmission, antilock brakes, electronic and mechanical systems, heating and air-conditioning, sound, and steering.

(5) The diagnosis, service, and repair of these vehicle systems are essential to the safety and proper operation of modern motor vehicles.

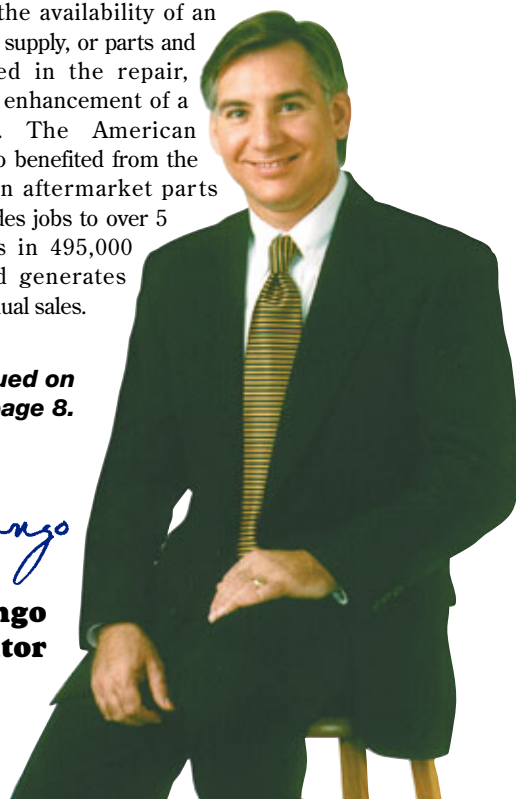
(6) In many instances, access codes prevent owners from making, or having made, the necessary diagnosis, service, and repair of their motor vehicles in a timely, convenient, reliable, and affordable manner.

(7) Consumers in the United States have benefited from the availability of an aftermarket parts supply, or parts and accessories used in the repair, maintenance, or enhancement of a motor vehicle. The American economy has also benefited from the availability of an aftermarket parts supply that provides jobs to over 5 million workers in 495,000 businesses, and generates \$200 billion in annual sales.

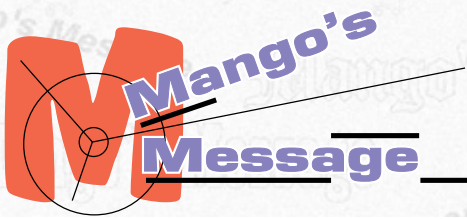
**Continued on  
page 8.**



**Greg Mango  
Editor**







**Continued from page 6**

(8) Vehicle owners in the United States should have the right -

(A) to all information necessary to allow the diagnosis, service, and repair of their vehicles;

(B) to choose between original parts and aftermarket parts when repairing their motor vehicles; and

(C) to make, or have made, repairs necessary to keep their vehicles in reasonably good and serviceable condition during the expected vehicle life.

(9) The restriction of vehicle repair information limits who can repair motor vehicles and what parts may be used to repair those vehicles, which limits consumer choice and thus limits competition.

(10) The Congress has provided the Federal Trade Commission with broad authority to make and enforce rules to foster competition, to prevent unfair methods of competition in commerce, and to protect consumers.

(b) PURPOSES - The purposes of this Act are the following:

(1) To require the Federal Trade Commission to prescribe and enforce rules necessary to ensure the right of a motor vehicle owner to obtain all information required for the diagnosis, service, and repair of the motor vehicle.

(2) To ensure the safety of all vehicle owners by requiring disclosure of all information necessary for the proper diagnosis, service, and repair of a vehicle in a timely, affordable, and reliable manner.

(3) To encourage competition in the diagnosis, service, and repair of motor vehicles.

**SEC. 3. MANUFACTURER DISCLOSURE REQUIREMENTS.**

(a) DUTY TO DISCLOSE - In accordance with rules prescribed by the Federal Trade Commission under section 7, the manufacturer of a motor vehicle sold or introduced into commerce in the United States shall promptly provide to the vehicle owner, to a repair facility of the vehicle, and to the Commission for use by any such vehicle owner or repair facility, the information necessary to diagnose, service, or repair the vehicle. Such information shall include —

(1) information necessary to integrate replacement equipment into the vehicle; and

(2) other information of any kind used to diagnose, service, repair, activate, certify, or install any motor vehicle equipment (including replacement equipment) in a motor vehicle .

(b) PROTECTION OF TRADE SECRETS

(1) DETERMINATION BY FEDERAL TRADE COMMISSION - The Federal Trade Commission may not require a manufacturer to publicly disclose information that, if made public, would divulge methods or processes entitled to protection as trade secrets of that manufacturer, but may require disclosure of such information to the Commission for the purpose of determining whether such information is entitled to such protection. Such determination shall be made on the record after an opportunity for an agency hearing.

(2) PREVIOUSLY DISCLOSED INFORMATION- No such information may be withheld by a manufacturer if that information

is provided (directly or indirectly) to franchised dealers or other repair facilities.

**SEC. 4. UNFAIR OR DECEPTIVE ACT OR PRACTICE.**

The failure by a manufacturer to provide the information required by section 3(a) constitutes an unfair method of competition and an unfair or deceptive act or practice in or affecting commerce (within the meaning of section 5(a)(1) of the Federal Trade Commission Act (15 U.S.C. 45(a)(1))). Violation of a rule prescribed under section 6(a) constitutes violation of a rule defining an unfair or deceptive act or practice prescribed under section 18(a)(1)(B) of the Federal Trade Commission Act (15 U.S.C. 57a(a)(1)(B)).

**SEC. 5. PRIVATE RIGHT OF ACTION.**

A vehicle owner or repair facility may bring a civil action to enjoin a violation of this Act and to recover the costs of litigation (including reasonable attorney and expert witness fees). Such an action may be brought in the district court of the United States for the district in which such owner resides or such repair facility does business, without regard to the amount in controversy or the citizenship of the parties.

**SEC. 6. RULEMAKING.**

(a) IN GENERAL - Not later than 180 days after the date of enactment of this Act, the Federal Trade Commission shall prescribe rules setting forth a uniform method by which a manufacturer shall provide the information required by section 3(a), including disclosure in writing, on the Internet, or in any other manner, or under such terms, as the Commission determines may be appropriate. Such rules shall take effect for vehicles manufactured after model year 1994.

(b) LIMITATION - The Federal Trade Commission may not prescribe rules that —

(1) interfere with the authority of the Administrator of the Environmental Protection Agency under section 202(m) of the Clean Air Act (42 U.S.C. 7521(m)) with regard to motor vehicle emissions control diagnostics systems; or

(2) conflict with rules prescribed by such Administrator under such section.

H.R. 2735 would be the catalyst that opens the OBD service providing market for all associated parties, making it more affordable, accessible and practical for all.

It would behoove us all, including our national association (ALOA) local associations and manufacturers and distributor associations, to align with such entities as the Automotive Aftermarket Industry Association, Automobile Wholesalers Association, and Automotive Parts Rebuilders Association, to support the passage of H.R. 2735.

For more information on H.R. 2735 and a list of supporting House of Representatives sponsors, go to the U.S. House of Representatives web site at: <http://www.house.gov/>. If you are interested in the availability of OBD (transponder) tools and information, I would encourage you to drop a note to your state representative in support of H.R. 2735. **TRL**



June 2002

# Letters

*The National Locksmith* is interested in your view. We do reserve the right to edit for clarity and length.

## Somewhat Amusing!

Regarding the Door Doctor editorial in Mango's Message in February, I too had a stressful relationship with Door Doctor for about a year. This was about four years ago. I collected the last of what they owed me and told them to "Take A Hike."

At that time I wrote to, and had printed, a warning letter to my colleagues (via letters to the editor) in *The National Locksmith*, as well as other trade publications. I had hoped to get the word out then, but I guess I failed.

Oh, by the way. I also find it somewhat amusing and ironic that Greg notes the problems finding/getting a response from the owner of Door Doctor, Richard Goodman.

I think Greg took a page from Richard's M.O., as I have left 3 voice mail messages over the last 2-years (for Greg) and have never received a return call (so I went elsewhere) to get an answer to my questions.

**The National Locksmith**  
**1533 Burgundy Parkway**  
**Streamwood, IL 60107**  
**Attn: Editor**

Now that's what I call "the pot calling the kettle black!"

Thanks Greg!

*Tim Nycum*  
*Michigan*

## Technitips Prize Winner's Appreciation

I just wanted to say "Thanks" for the prizes that I have won this year from Technitips. I just received the Curtis 2200 semi-automatic duplicator and is a very nice machine, so again I say thanks to all who are involved in reading the tips, editing them, publishing them, and especially the manufacturers and producers who so generously supply the prizes.

*Chris Shook*  
*Tennessee*

## Good for Them

I like the article that was in the New York Times, regarding "Why Keys Cost a Kings Ransom." It just makes those of us who are not only proficient at transponder technology, but excel at them, seem even more of a godsend to those stranded customers.

*Redd Bristow*  
*E-mail*

## I Do Not Like It

The article in the New York Times, told the public to count the locksmith out. Stating that we are not capable of new technology. Hmm, lets see... new transponder equipment in the online store here for \$4,000, that is a savings of \$46,000.00 as opposed to \$50,000 according to the article, but we can't use it because the technology is beyond us!



How nicely our National Association represents us. And everyone wonders why I am not an ALOA member. Because \$125.00 per year for a magazine subscription to an organization that represents it's own interest and not mine, is too much.

*Robby Stout*  
*Texas*

## TCL-1 Pitch

Your sales pitch for the TCL-1 Multi-Brand Transponder Key Programmer is well taken, but who's going to tell the customer that someone other than the dealer can produce a key for them?

People rarely know that a locksmith can interrogate a VATS system.

I am in my twenty-seventh year as a locksmith and never have I gotten any support from the organizations to which I belonged - not ALOA, not NWLA, not SAVTA, not NSO, not NLAA, not *The National Locksmith*, not Locksmith Ledger, not Reed Reporter (Bill Reed, however, was an outspoken advocate for locksmiths and their education).



As a director for the Northwest Locksmith Association, I worked hard and without support to implement a basic (repeat basic) competency test for locksmiths entering the profession. For three years, I rewrote an update for the bylaws of their organization. Included was a requirement that a member complete and pass such a test within three years of becoming a member. Failure to do so would exclude that person from membership. The bylaws were approved with all implementations, except the provision for testing.

While writing the bylaws, I started a public relations fund for educating the public about locksmiths. We sponsored swap sales, raffles, and sale of specialized tools. Soon, a nest egg was building and a starting point was in view. Although the fund was "ear-marked" for the specific program, the Board chose to spend the money on a totally unrelated project-end public relations program.

Had publishers and organizations dedicated some of their resources to lobbying in behalf of the industry, we, as locksmiths, would probably be enjoying a lot more public esteem. Instead, we have a totally unregulated industry in which anyone can participate. So as long as we have among us, people who are totally inept, and who destroy the name of the industry as fast as those who are competent, builds it, we will always have to accept our place as a "backseat" industry. To those who whine that we are being edged out by other non-locksmith industries, I say we are a product of our own doing.

Thank you for the opportunity in which I may express my opinion.

"Dick" R.W. Staples, CML  
Washington

**Publisher's Note:** I applaud you for being as active as you have been in trying to promote your point of view. The main problem here is that every organization you blame for not lobbying on the locksmith's behalf, DOES do so every chance it gets. However, each, including TNL, is a very small organization with extremely limited resources available for lobbying, which as you know, is terribly expensive.

As an individual locksmith, I'd at least try and let my customer know in my ads and business cards, that I do work on the new high security keys. Self

*reliance, while not fun, may just be necessary here.*

Marc G.

## To The Dealer You Go

Just read Marc Goldberg's commentary on transponders. No way could I afford \$3,995.00 for a TCL-1 machine. I am a "one man band." Sorry transponder owners, but no way can I "get you going." Off to the dealer you go, on Sunday even! Good Luck!

Tom Seager  
Michigan

## Codes Needed Sooner

I've been a locksmith for 25 years-23 years in my own business. I've had HPC codes in my store for the past 20 years, and probably won't have access to purchase this year's codes until late March or April. I've enclosed an almost full-page article from the Sunday Edition, Feb. 16, 2002, of The Philadelphia Inquirer, which shows color pictures and descriptions of numerous 2003 model year vehicles now on the road. And I can't purchase 2003 vehicle codes until March or April of next year? That's 14 months from now!

At a meeting of the Keystone State Chapter of ALOA last fall, our speaker was an HPC area rep. I brought up the subject of this annual belated publishing of vehicle codes. Every year I have at least one car reposessor come into my store in December or January with a code for a car he is to repossess. Unless it's a repeat code series, I don't have it and can't get it. His reply was that this comes up every year, and there's nothing to be done about it. I loose business every year. The new cars have been out long enough to require the services of a reposessor and I still can't get the codes.

It's now February 2002, and I don't have the 2002 codes. The 2003 vehicles are on the road, and I can't get those codes either. Perhaps somebody reading this will get the idea that this is a business opportunity. Publish the codes earlier and get lots of business. I would buy the 2003 codes in February 2002 if I could get them. I would have bought the 2002 codes in February 2001 if I could have gotten them. The cars were on the road then, so the codes had been determined. If the cars are on the road, driven by paying customers,

then the dealers that sold the cars have recorded their codes. Locks installed in cars with code numbers stamped on them are now cruising the streets. To tell the locksmith that he can't buy the codes timely should be considered bizarre behavior, not standard operating procedure. Perhaps The National Locksmith would publish them. If you do, let me know.

John T. Dunn III, CML, CAAT  
Pennsylvania

**Publisher's Note:** Don't blame the messenger is what I want to suggest to you. It's not like code software publishers HAVE the new codes early and are just too lazy to get them out to you in time. Each time a new series, or use of an old series comes out, it takes time to research and publish that. So you can't really blame HPC for that problem. It's something all code providers have to deal with. You can just check with each of them to see when in the year they normally release their updates.

Marc G.

## WHC Info Needed

We are in search of codes and keyblank identification for WHC furniture locks. These are used on gang locks on wood desks and wood lateral files. Keys appear to have a National Lock style key that has uneven shoulders. Any help would be appreciated.

David B. Sorci  
E-mail: mkb@netshel.net

## Shift Knob Problem

I just wanted to thank you so much for *The National Locksmith* magazine. I really enjoy reading it, especially the Technitips section.

The main reason I am writing you is about a tip given in the Technitips section titled "Interlock Adjustment." Mr. Ball may have missed one of the problems with the lock. The majority of the problems I have encountered is that the shift knob itself is either defective, or in a couple of cases I have seen, the rubber covering the push-button has slipped off and isn't letting the button depress the full distance. This has caused a lot of headaches in my area. Now I look at the knob first.

Thanks for all the tips this magazine gives each month.

William Knuckles  
Kentucky

TNL



# Auto Security Products's TCL-1

*The new weapon for transponder equipped vehicles.*

**T**ransponder systems in cars threatened to take the locksmith out of the business of making car keys. Machines such as the Silca RW2 and Jet ETD-1, were developed to duplicate certain transponder keys. But those machines do not help when all of the keys to the car are lost. Also there are some newer design encrypted transponder keys that these machines will not work on. So something more was needed.

Besides the official car manufacturers' machines, which are very expensive and sometimes difficult to obtain, I believe that the TCL-1 is by far the best value for the money for this type of machine.

TCL-1 has been sold in Europe for approximately 2 years, so it is not a completely new product. It had not been offered before now in the USA because the original programs were for cars that are popular in Europe, but not in the U.S. Not until the development of software for Nissan, Mitsubishi, and Chrysler did TCL-1 become an interesting product for the U.S. market.

This is important because its history in Europe insures U.S. customers that the TCL-1 hardware has been proven reliable in the field. TCL-1 includes a 1-year warranty from the date of purchase.

Let's walk through what it's like to program new keys into the several brands of vehicles using the TCL-1.



*By Michael Hyde*



- 1. The TCL-1 from ASP is the first transponder key programmer to be introduced to the locksmith industry that is not controlled by a car manufacturer. It is made just for locksmiths and is expandable, as additional software is made available through updates for more vehicles. The TCL-1 can program new or additional keys directly into the vehicle's computer by connecting to the vehicles computer port (OBD2).*



## Nissan Altima



2. First is the Nissan brand, which also includes Infiniti. For this article I am going to use a 2002 Nissan Altima. All current Nissan & Infiniti models are supported by the TCL-1.



3. Since each manufacturer has it's own slightly different communication path to the vehicle's computer, a hardware adapter was needed for the different brands. You will use the Nissan adapter for this Altima. The Nissan adapter is included with the purchase of the TCL-1.



4. Once you connect the Nissan hardware adapter to the TCL-1 you can then connect the cable to the car's computer port called the OBD2.



5. Insert the key that you wish to program and turn to the "Run" position. I am using an Ilco N101T key. A JET DA34-PHT will also work.



6. This is the Brand Menu. Use the Arrow key to select the brand Nissan. Press the "Enter" button to select Nissan.

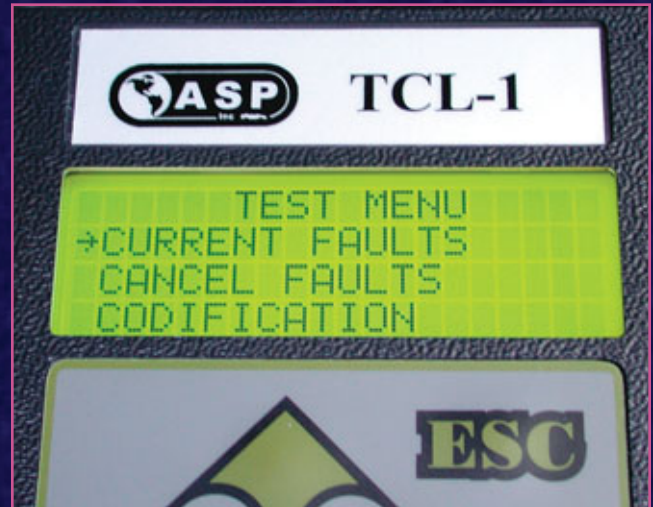


7. Press the "Enter" key to continue past the Language & Version number screen.





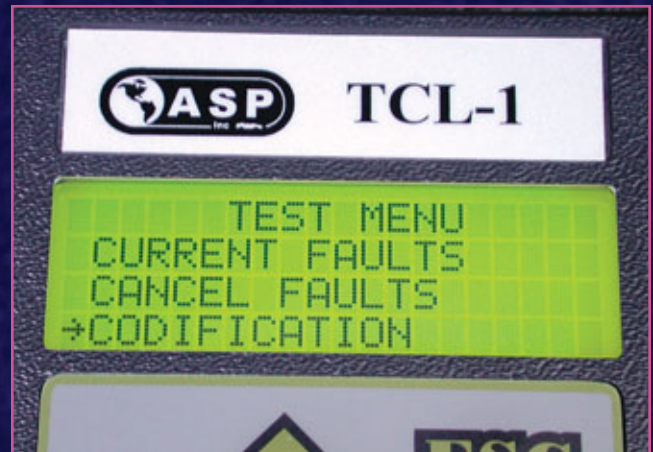
8. There are four different software types used by Nissan & Infiniti in the U.S. To program keys into the ECU you will need to select the "Type". Programming application chart is in the TCL-1 user's guide.



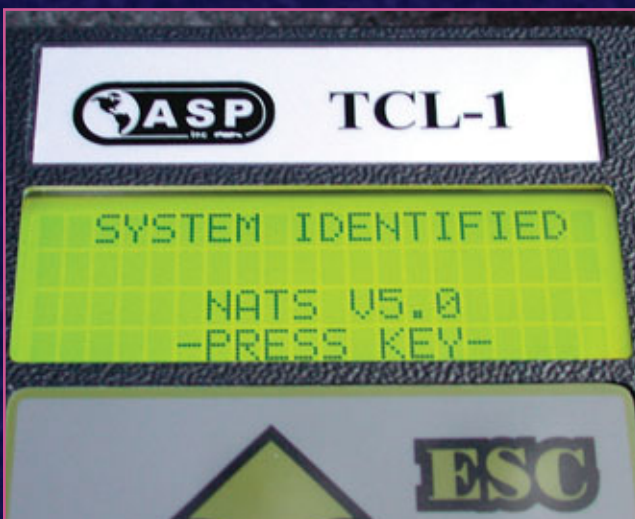
11. Press the "Enter" key to continue past this screen.



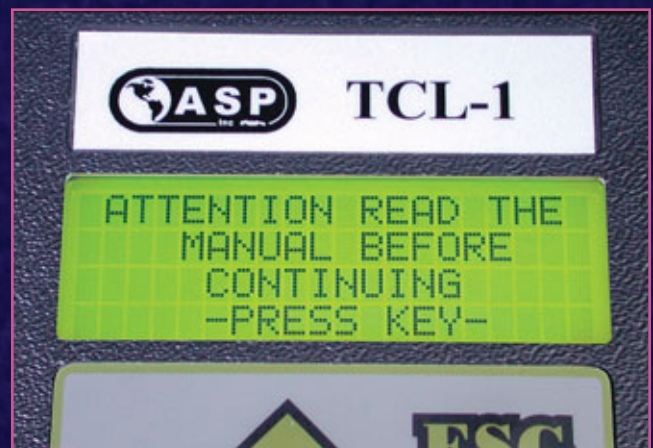
9. The TCL-1 is attempting to communicate with the ECU.



12. There are several functions that can be carried out in the Nissan Test Menu. Use the Arrows buttons to navigate up and down. You will select the "Codification" choice from the menu to program in a new key to this Altima, since all keys were lost.



10. The TCL-1 has recognized the system being used and is ready for programming the keys or checking for Faults.



13. Important Note: You must have any existing keys present, if you want them to continue to start the vehicle. All keys are erased during this process and are considered "New" again and must be added back into the immobilizer system. Once the access is granted, the TCL-1 cuts off communication with the immobilizer and the following process must be used to finish the programming of transponder keys.

Continued on page 18



Continued from page 16



14. Most 2000-2002 Nissan / Infiniti's require a PIN code. The PIN code is all the same in the U.S. up through 2002. This number is in the TCL-1 user's guide.



15. The key is being "Codified" (programmed).

#### If You Are Programming 1 Key and No More:



16. The key in the ignition is now programmed and there is nothing else to do. Unplug the TCL-1 and start the vehicle.

18 • Visit [www.TheNationalLocksmith.com](http://www.TheNationalLocksmith.com)

#### If You Are Programming More Than 1 Key:

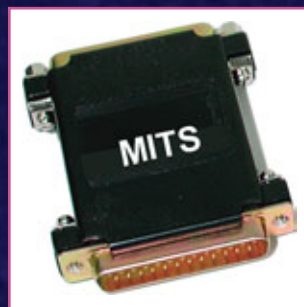
- The key in the ignition is now partially programmed. Remove the key.
- Place your next key in the ignition and turn to "On" for 4-5 seconds. Remove the key.
- Repeat this process for each additional key.
- Re-insert the first key you started with and turn to "On" for 4-5 seconds. Remove the key.
- Unplug the TCL-1 and start the vehicle.

That's it for the Nissan Altima, it's time to collect the money for a 25 second programming job.

#### Mitsubishi Galant



17. Next, let's look at the Mitsubishi. Here is a 2000 Mitsubishi Galant, a very popular car among the rental car agencies with total U.S. sales in the hundreds of thousands. You are probably going to run into one, sooner or later.



18. You will use the MITS adapter for this Galant. The MITS adapter is included with the purchase of the TCL-1.



19. Connect the MITS hardware adapter to the TCL-1. You can then connect the cable to the car's computer port called the OBD2.

Continued on page 22



Continued from page 18



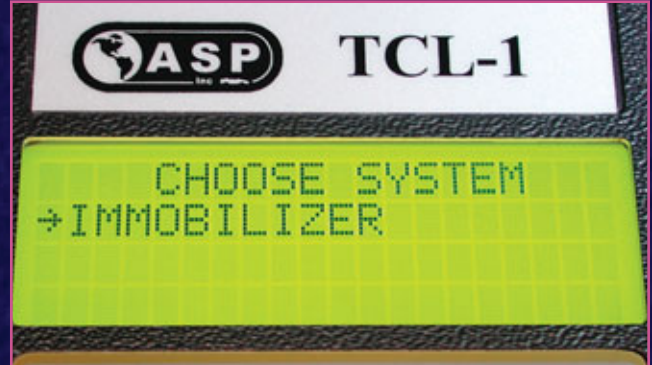
20. This is the Brand Menu. Use the Arrow key to select the brand Mitsubishi. Press the "Enter" button to select Mitsubishi.



21. Press the "Enter" key to continue past the Language & Version number screen.



22. Insert the key that you wish to program and turn to the "Run" position. Here I am using a Strattec 598992 key.



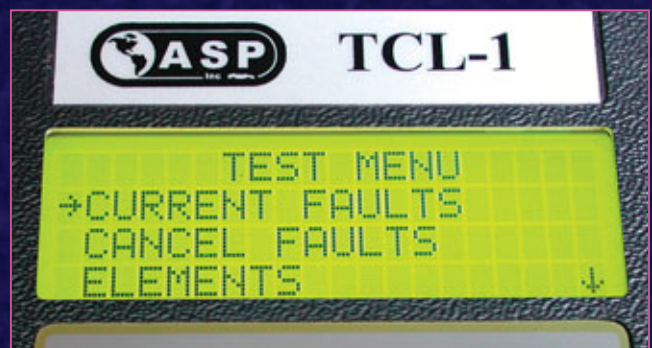
23. You will select the "Immobilizer" system from the system menu and press Enter.



24. The TCL-1 is attempting to communicate with the ECU.



25. The TCL-1 has recognized the system being used and is ready for programming the keys or checking for Faults. Press the "Enter" key to continue past this screen.



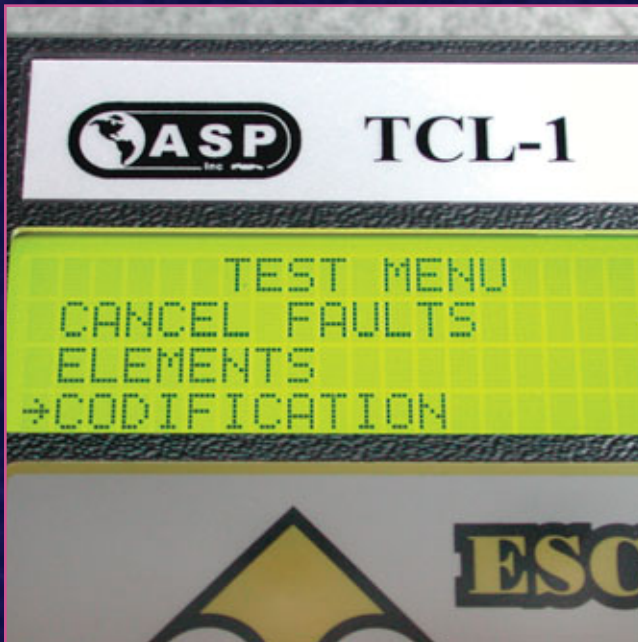
26. From this menu you can carry out several functions in the Test Menu. Use the Arrow buttons to navigate up and down.



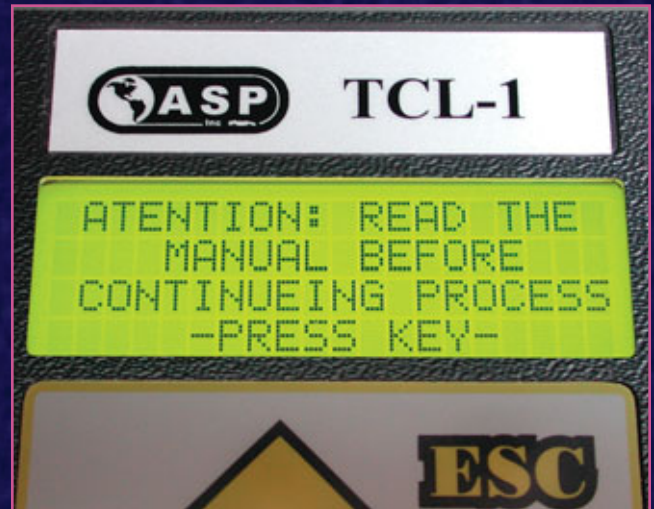
You can access the Fault menu and look for any Faults that might be registered in this vehicle's computer (ECU) and then you have the option to clear them out. Faults are hardware problems that have failed or are failing and the vehicle's computer (ECU) makes a note of that for a

technician to repair and after the Fault has been cleared or the hardware device that caused it was replaced.

You can also check to see how many keys have registered and what the voltage in the car is.



27. You will select the "Codification" choice from the menu to program in a new key to this Galant, since all keys were lost.



28. Here you are advised to read the User's Guide included with the TCL-1. Important Note: You must have any existing keys present, if you want them to continue to start the vehicle. All keys are erased during this process and are considered "New" again and must be added back into the Immobilizer system.

*Continued on page 26*

## NSO One Year Membership



Free when  
you join NSO

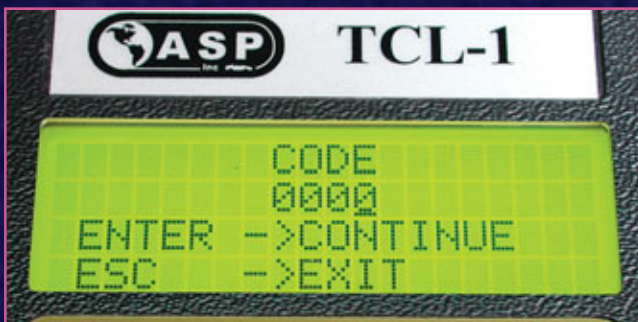
To make big profits  
in safe work with no  
hassles...you need  
information!

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Continued from page 23



29. All 2000-2002 Mitsubishi's require a PIN code. The PIN code is all the same for each model in the U.S. up through 2002. For example: all the Galant's use the same number and all the Eclipse's use the same number. These numbers are in the TCL-1 user's guide.



30. Here the TCL-1 has programmed the first key and is asking if you want another key programmed.

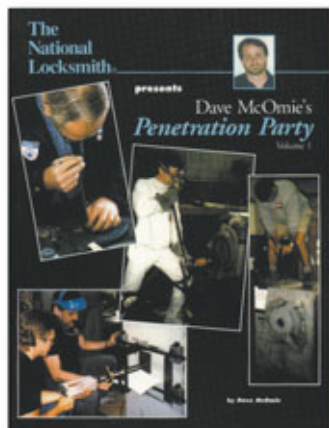


31. Let's say the customer did want more than one key and you pressed the Enter button on the TCL-1. This is the response you would have gotten. Remove the key in the ignition and insert the next key and turn to the On position.



32. Here the TCL-1 has programmed the second key and is asking if you want another key programmed. You are all done now and it's time to collect the money.

## Penetration Party



- Uncensored!
- The Safes!
- The Tools!
- The Action!
- The Perfect Openings!
- The Bloopers & Blunders!
- The Slick Tricks!

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#PP - 1

In conclusion, the TCL-1 is an effective way for the locksmith to make additional income programming transponder keys. The TCL-1 is available from your local ASP distributor for \$ 3,995. Items included in the purchase of a TCL-1 are: Carry Case, TCL-1 unit, OBD2 cable, Nissan early OBD1 cable, Hardware Adapters for Audi-VW, Chrysler, Ford, Infiniti, Mitsubishi, & Nissan, and a comprehensive User's Guide.

For more information contact an ASP dealer or: Auto-Security Products, P.O. Box 10, Redmond, WA 98073. Phone: (425) 556-1900; Fax: (425) 558-1205; Web: [www.carlocks.com](http://www.carlocks.com). Circle 300 on Rapid Reply. **NL**



# AUTOMOTIVE Locksmith TOOLS

**W**e all know the importance of having the right tool for the job. It can sure make life easier. Each year manufacturers introduce new products that can make a job easier, faster, safer and more economical.

## A-1's PAK-A-PUNCH™ VALU-SET

A-1 Security Manufacturing Corp. has a special "Great Giveaway" for ALOA 2002. Locksmiths who purchase A-1's PAK-A-PUNCH™ VALU-SET between April 1 and July 31, may ship a copy of their invoice to A-1 and receive a free carry case, plus a free 12-piece pick-set. The value of this offer (all products purchased individually) is \$894.00. The suggested dealer price for the VALU-SET (PAK-MSA1) is \$625.00.

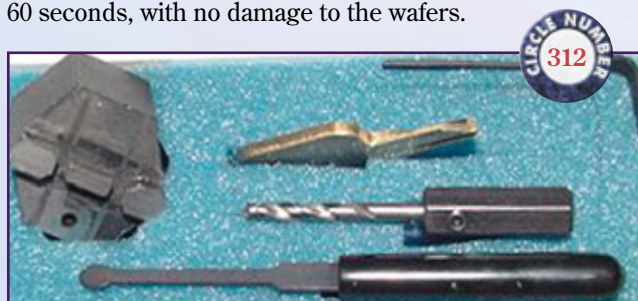
The VALU-SET includes A-1's PAK-A-PUNCH™ cutter, plus accessories for GM, Chrysler, and Ford. Additional accessories are available for Domestic & Foreign autos, Kwikset, Schlage, Master Padlock, and I/core.

*For additional information call: (800)-881-5206.*



## Aable Ford 8-Cut Ignition Removal Kit

Frank Markisello from Aable Locksmiths has designed a tool, which allows you to either pick all Ford 8-cut ignition locks in minutes, or to fit the key and replace the lock. The tool allows you to fit a key to all the locks on the car, or if needed, you can use the force tool included in the kit, to just turn the ignition to the on position in less than 60 seconds, with no damage to the wafers.



Just fit the key to the wafers, use a new plug, and use the same lock housing. Also works on the Villager and Voyager. The kit comes with step-by-step photos. The first job will pay for the complete kit.

*You can view the product catalog at [aablelocksmiths.com](http://aablelocksmiths.com).*

## ASP TCL-1

ASP, Inc. has one machine to program transponder keys for Nissan/Infiniti, Mitsubishi, Chrysler/Jeep, Volkswagen/Audi, Cadillac Catera, and some models of Ford USA. The TCL-1 can be used for programming new keys when all the keys to the car are lost, plus duplicate encrypted keys that cannot be cloned.





New programs are currently being developed to service additional vehicles not currently serviced by the existing programs. The manufacturer is fully committed to offering a versatile top quality product at an affordable price. The TCL-1 is available from all ASP distributors.

For more information, visit the website at: [www.tcl.com](http://www.tcl.com), or contact your ASP distributor.

### Gator Tool Wafer Popper

The "Wafer Popper" was developed by Gator Tool Company to help in the wafer removal process. Many times in locksmithing, removal of stuck or peened wafers can be a circus act, trying to juggle the lock, screwdriver and hammer, all with just two hands. Have you ever lost a wafer, broke a lock, or got your screwdriver stuck in the core? Not anymore! One hand holds and squeezes the tool, while the other hand catches or rotates the lock.



This tool works so well, we fit a slogan to match the speed, "Click, Click, Click, it's just that quick." The tool can do the standard locks or the offset wafers equally as well. The handles are cushioned for comfort, with a torsion spring for one handed use and nickel plated for weather and durability.

For more information call: (719) 591-8343, E-mail: [steve@aduxpond.com](mailto:steve@aduxpond.com), or at: [www.aduxpond.com](http://www.aduxpond.com).

### High Tech Super Viper™

The Remote Control Super Viper™ is the world's first remote control, inside access type tool, with a remote control snare mechanism. Designed to capture the door



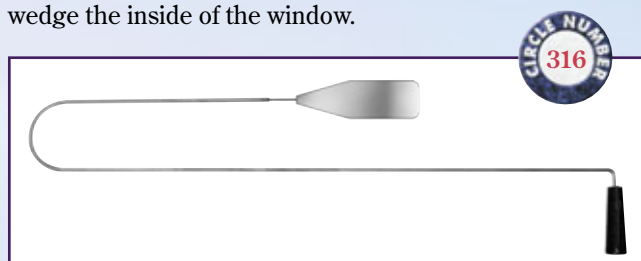
lock button on vehicles where the door lock linkage, leading to the vertical button, is shielded inside the door.

The Super Viper™ goes into the door, while the tip comes out on the inside of the door. A quick pull on the remote control button and the door is open in seconds. It is a fast and reliable opening system, for those difficult to open vehicles.

For more information contact High Tech Tools, 1400 SW 1 Street, Miami FL 33135, Phone: (800) 323-8324, or at: [www.hightechnetools.com](http://www.hightechnetools.com).

### HPC's Inside Wedge

Have you ever wished you could wedge the inside of a window while executing an under and over car opening procedure? Now you can! Using HPC's new Inside Wedge (AW-UO) you can now insert this wedge in the door cavity, under the window, and then using its unique swiveling tip, lift the wedge up the inside of the glass and wedge the inside of the window.

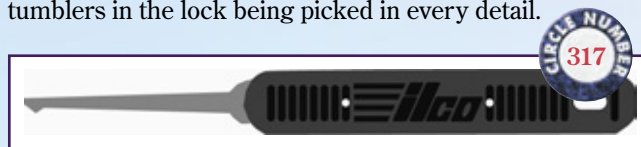


Once this is done you can easily insert an under and over car opening tool, such as HPC's Caddy Killer™ (CO-60), Original Killer (CO-59), Stretch Killer™ (CO-61) or Super Killer™ (CO-70) and open the car.

For more information call: (800) 323-3295, or E-mail: [hpc@hpcworld.com](mailto:hpc@hpcworld.com).

### Ilco Stainless Steel Picks

ILCO® stainless steel lock picks are now available with Santaprene handles, that provide superior comfort, without muffling the feel of the lock tumblers. The Santaprene molded handles of the P901 series Ilco lock picks, has been carefully engineered to provide a comfortable grip that allows the operator to control the pick more precisely and to feel the movements of the tumblers in the lock being picked in every detail.



Over twenty models of Ilco popular stainless steel lock picks are now available with the new Santaprene pick handles.

For more information call: (888) 217-5654, or E-mail: [commercial.sales@kaba-ilco.com](mailto:commercial.sales@kaba-ilco.com).

### Lockmasters TCL-1

Transponder technology once threatened to take the locksmith out of the business of making automobile keys. Now, with tools like the TCL-1, the locksmith can duplicate certain transponder keys, even when all the keys to the car are unavailable.

The TCL-1 is offered as a complete kit, including all software and accessories required to service the following vehicles: All models of Audi, VW, Cadillac Catera, Nissan,





Infiniti, Chrysler, Jeep, Mitsubishi, Mazda Tribute and B-Series trucks (Ford based vehicles). Additionally, the following models can be serviced, Ford-Explorer, Escape, Focus, Ranger, Taurus, and Windstar and for Mercury – Cougar, Mystique and Sable.

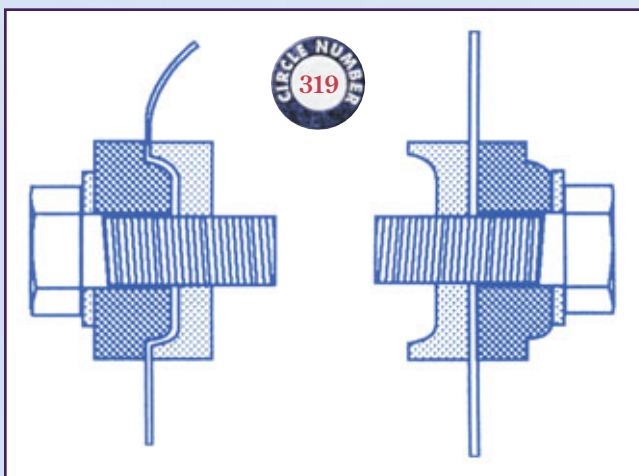
Additional 2000–2002 models, as well as pre-2000 models, will be available through software updates in early 2002.

To order your TCL-1, call Lockmasters at: (800) 654-0637.

### Lock Technology Lock Reforming Tool

The Model 700 Lock Reforming Tool, from Lock Technology Inc., fits GM, Ford Chrysler and most import cars. The tool instantly reforms damaged lock openings to the original contour of the auto.

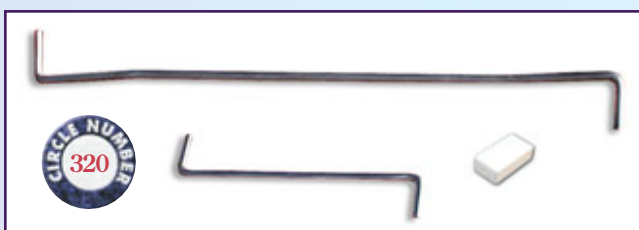
For more information call: (800) 421-7241.



### McCoy Productions MCR Kit

The MCR Kit from McCoy Productions removes both vertically and horizontally mounted door lock clips, on door locks that are separate from the door handle and use the common horseshoe style door clip. Car door locks can be opened without removing the panel. The kit can be used for rekeys, making keys for cars without glove compartment locks and many imports.

The kit contains two stainless steel clip removal rods, a rubber coated magnet, a finished wood door wedge, five



sheets of round black plug labels, five horseshoe door clips and an instruction sheet, which shows several alternatives for removing hard to access horizontal lock retainer clips.

For more information call: (405) 417-1585.

### PRO-LOK Handle Opener Tool

The PRO-LOK AO24 “M.C.O.T. – Handle Opener Tool” is a modified version of the original M.C.O.T. (Multi Car Opening Tool). This tool is designed to access and manipulate closed pull handles on vehicles that have stiff handle springs, that requires a higher pull strength than any of the other M.C.O.T. tools may be able to provide.

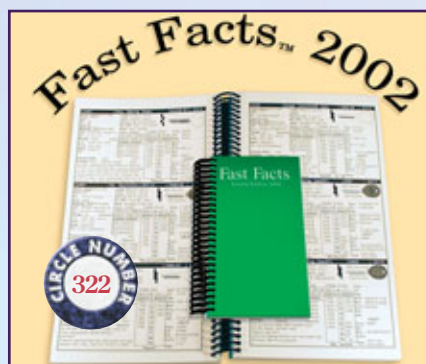


The 2002 Land Rover Freelander has very stiff pull handles such as this. The tool provides enough pull power to lever these stiffer handles completely rearward to unlock the door easily.

For more information call: (714) 633-0681, or E-mail: mail@pro-lok.com.

### Sieeking Fast Facts

The Fourth Edition of Fast Facts™ is now available from Sieeking Products Co. Fast Facts is an encyclopedic index of auto and motorcycle key making facts and lists nearly 2,700 models from 1960 through 2002, with 380 auto key plates and 128 motorcycle key plates. The fourth edition is spiral bound to lay flat and is available in two different sizes. The pocket size is 3-3/4”x 6-1/4” and the desk size is 6” x 11”.



The new Fast Facts has an expanded motorcycle index and new NGS and PATS Transponder protocol tables. The expanded “Helps” section has the latest “Transponders,” the newest key numbers, code series, and step by step transponder originate, duplicate, and emergency start methods. The Helps section has doubled in the 2000 Fast Facts™.

For more information contact Sieeking Products Co. at: P.O. Box 4287, Rockford, IL 61109 or call: (815) 874-8715.

### Slidlock Frameless Window Tool Kit

The Slidlock Frameless Window Tool Kit now comes with a second extension tip, used to pull inside door handles, as does the L shaped tip. This new extension fits a special coupler, which prevents the tool from breaking at the thread. It is the first tool added to the Z-Tool System since 1995, which shows the important need for all lockout technicians to have the



**Continued on page 32**



**Continued from page 30**

ability to manipulate all mechanisms within the interior of the vehicle, such as power switch, manual lock and the inside door handle.

The Frameless Window Tool is built with the same stainless steel rod used in every Z-Tool built since 1985.

For more information call: (800) 336-8812.

**Steck BigEasy "GLO" Kit**

The Steck BigEasy "GLO" Kit is the safest and easiest Lockout Kit for all cars and light trucks. Simply insert the inflatable EasyWedge at the upper rear corner of the door and reach in with the BigEasy Tool to actuate the interior lock button, slide or handle to, unlock the door.



The "GLO's" high visibility is easy to see through tinted glass and in low light conditions. A Lock Knob Lifter Tool is included for those vertical buttons on the window frame. Receive the complete kit for only \$64.95.

Call Steck Manufacturing Company at: (800) 227-8325, or at: [www.steckmfg.com](http://www.steckmfg.com).

**Tech-Train Update**



in factory service manuals. Step by step instructions guide you through each procedure, from start to finish.

For more information, visit the web site at: [www.techtrainproductions.com](http://www.techtrainproductions.com).

The 2002 update for Steve Young's Quick Entry Car Opening Manual, is now available from Tech-Train. This update not only covers all that is new for 2002, but many 2003 models as well, including the Cadillac CTS, Toyota Corolla, Ford Expedition, Lincoln Navigator, Suzuki Aerio, H2 Hummer, Hyundai Tiburon, Honda Pilot, Subaru Baja, Lexus GX 470 and many more.

Each opening procedure is illustrated with a clear, concise line drawing, like those used

**The Determinator™**

The Determinator™ tool count is now up to 39! This automotive lock-decoding tool has become an essential part of the automotive locksmiths arsenal of tools. Used properly, a key can be generated for an automobile in just a matter of a few minutes. This tool will enhance the impressioning skills of most locksmiths as well.



BMW, Chrysler, GM, Ford, Honda, Hyundai, Mitsubishi, Isuzu, Kia, Mazda, Nissan, Infiniti, Saturn, Toyota, VW, Volvo, and Mercedes are just some of the makes covered.

Contact The Determinator Tool Company at: (800) 561-0443, for more information.

**Wedgeco's Broken Key Extractor Kit**

Wedgeco has a newly designed 2 in 1 Pliers, for master pinning locks and for broken key removal. The nose of the pliers slide into all automobile door and ignition locks and hold back the shutters, while at the same time holding open the double-sided wafer tumblers. The patented pliers are made of stainless steel and come with sturdy, red colored rubber handle grips.



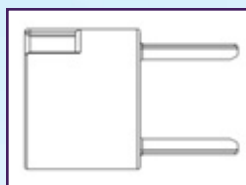
Using the new extra long .040 spiral wire ex-tractors will allow for easy broken key removal as well. The spiral wire extractors have a sharp point, and the 2-1/4" long spiral wire is sealed in the orange plastic handles with a strong, hardened epoxy.

Watch for a new web site coming soon at WedgeCo.com and BrokenKey.com.

For more information call: (800) 452-2304, or E-mail: [wedgeco123@msn.com](mailto:wedgeco123@msn.com).


**STRATTEC Ford Ignition Tool**

STRATTEC has introduced a 381944 Ford Ignition Tool to the locksmith market. The tool



is to be used when assembling or disassembling the new style ignition first introduced on the 2002 Ford Explorer and Mercury Mountaineer.

This ignition does not include a sidebar and the tumblers are free to move in and out of the plug during assembly and disassembly. STRATTEC engineers designed this simple to use tool, which depresses the tumblers during plug removal and installation. The 381944 tool significantly reduces the time it takes to service this style ignition. Since time is money, this tool is well worth the investment.

Contact Strattec at: 414-247-3333, Fax: 414-247-3329. 



# NINETEEN NINTY-NINE LEXUS RX300



by Michael Hyde & Alan Morgan

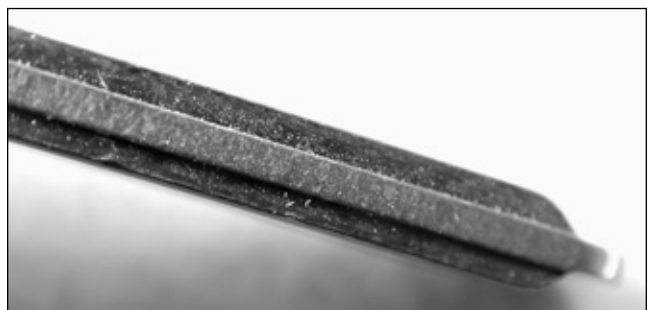
• PART ONE •

To begin this two part series we will start with the ignition, hatch and glove box locks.

*1. The 1999 Lexus RX300 has a High Security key with a transponder system. The code series is 40,000 to 50,000. This SUV is also equipped with front seat mounted Side Impact Airbags.*



*2. The key is an internal 4-Track. There are three depths.*



*3. The older Lexus keyway had five depths. The master key on the new system has a slight groove on each outside corner. A key without the groove is a Valet.*



*4. The remote functions are built into the head of the key.*



## Ignition Lock



5. The ignition lock cylinder.



6. There is a trim cover on the front of the ignition lock. The cover snaps on and off.

## Pocket InstaCode

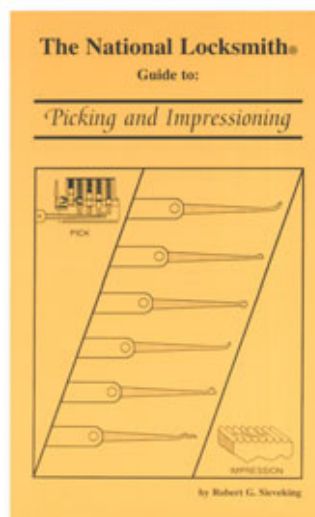


Pocket InstaCode has all the important features of the InstaCode program, packed into a program small enough to run on a Pocket PC.

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#PCODE-03

## Picking & Impressioning

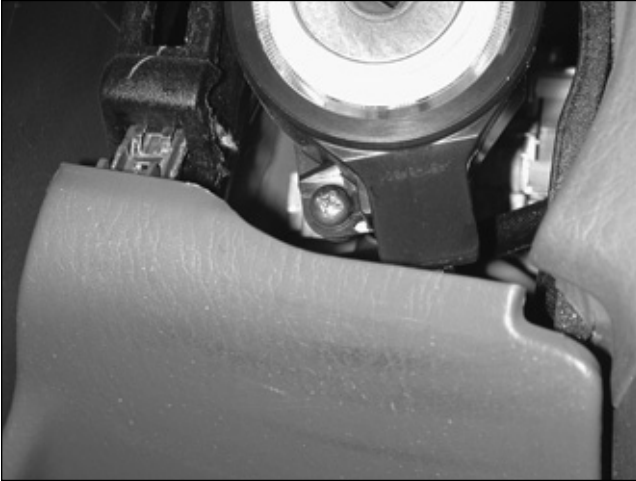


Here is the most complete book ever published on picking and impressioning locks! You will have everything you need to know about how to open almost every kind of lock that can be picked.

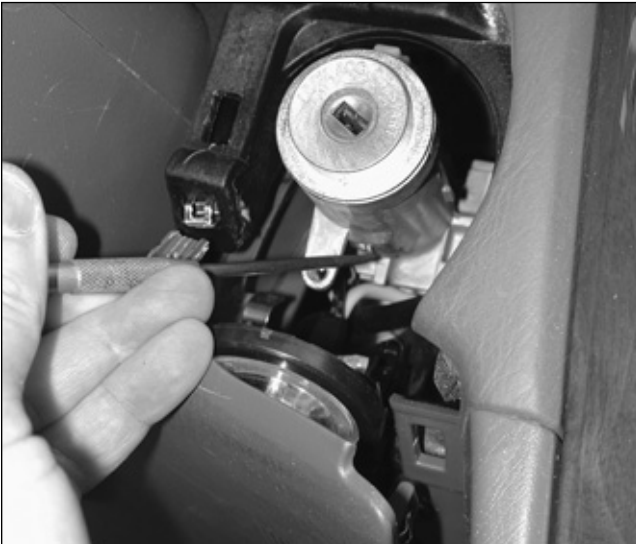
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#PI





**7.** There is an illumination ring and transponder induction coil mounted on the front of the lock cylinder. Remove the Phillips head screw from the illumination ring and transponder induction coil and then move them to the side.



**8.** This is an active retainer ignition lock cylinder. The retainer is on the bottom of the ignition housing.



**9.** Insert a working key and turn to the first accessory position, press the retainer pull the lock cylinder out.



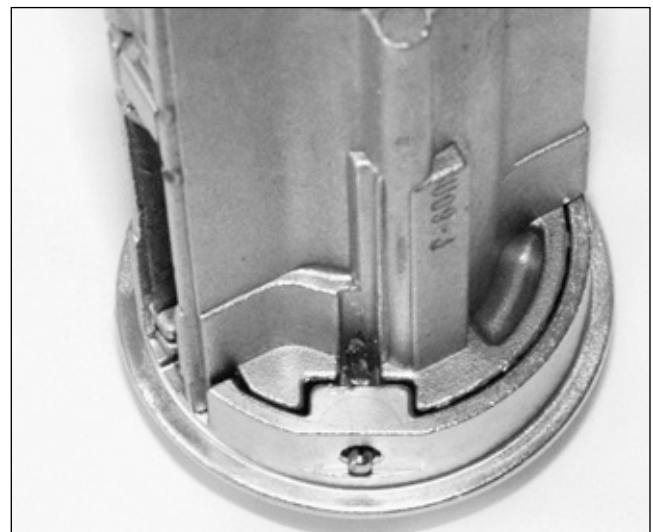
**10.** The ignition lock removed from the car. The step in disassembling this lock is to drill a small hole directly or at an angle to the top roll pin on the face cap and then remove the roll pin. This is the same type of roll pin that is found on other Lexus & Toyota models.



**11.** On each side of the face cap is another set of roll pins. They are easier to remove.



**12.** I grounded the tip on a small steel screwdriver to a long angle.

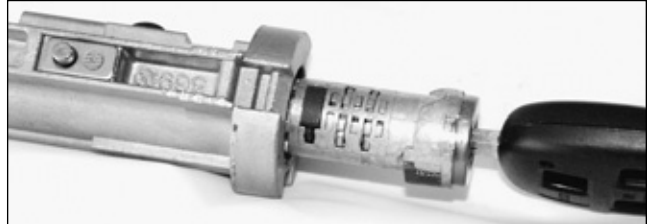


**13.** I then tap the screwdriver tip into the backside of the side roll pins and twist the screwdriver tip around to force out the roll pin.





14. Don't forget to remove the tru-arc ring on the back of the plug.



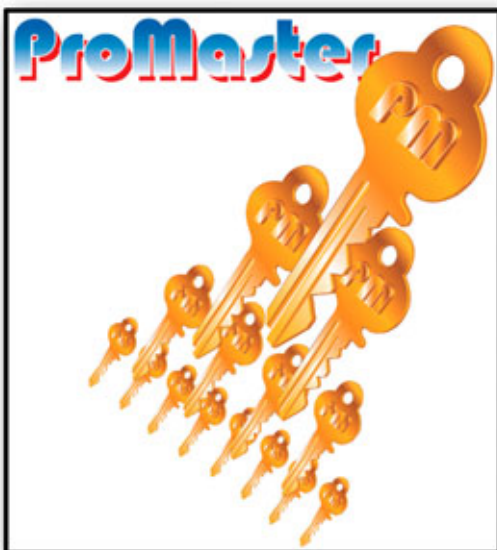
15. Now that you have the face cap removed you can slide out the plug. Here is the most important thing in the whole article. Do not pull the plug out of the housing using the key, always push the cylinder plug out from the back. This is true with all Lexus ignition locks. What can happen is that when you try to pull the plug out with the key, the key can slip out slightly to the next space positioning and permanently bind the key, the cylinder plug and the housing all together.

#### Hatch Lock



16. The hatch lock cylinder is located above and to the right of the license plate.

Continued on page 40



## ProMaster 5

ProMaster 5 is without a doubt, the most comprehensive and easy to use master-key system management tool available anywhere in the world.

[CLICK HERE TO LEARN MORE](#)





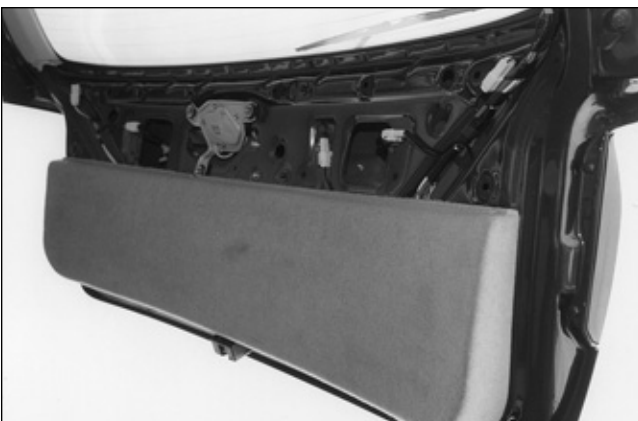
Continued from page 37



17. The rear hatch opens up high giving you plenty of area to work in.



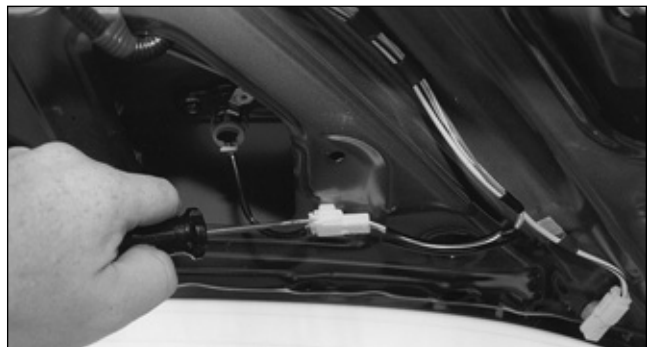
18. Remove the upper plastic trim section. It is held in place by snap-in fasteners.



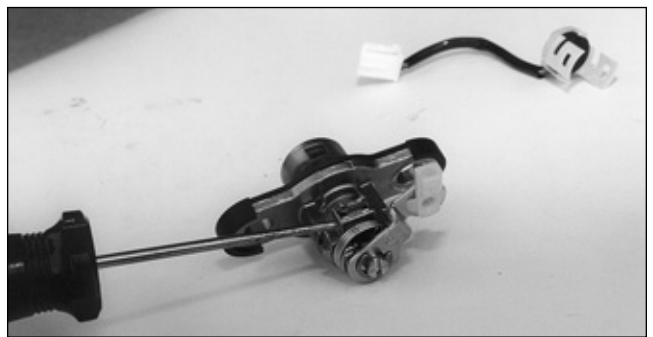
19. A view of the trim section removed.



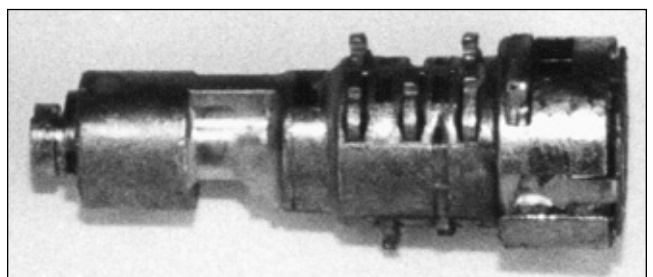
20. The hatch cylinder is easy to get too. There are two 10mm bolts securing the lock cylinder to the hatch. Disconnect the linkage rod and remove the 10mm bolts.



21. Use a small ice pick or screwdriver to disconnect the cylinder switch.



22. On the rear of the lock cylinder is a security keeper. Drill a 7/64" hole on the side of the keeper housing and pry it out.



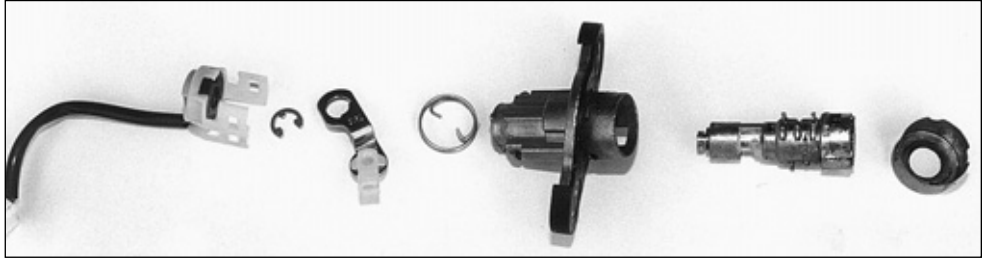
23. The hatch lock cylinder contains 10 tumblers, 5 are left and 5 are right. There are only 3 depths and all tumblers are split tumblers. The hatch lock contains all the tumblers needed for a complete key.

Continued on page 42



*Continued from page 40*

**24.** The hatch lock cylinder comes apart pretty easy. The face cap is reusable. Remove the switch connector and tailpiece and the cylinder plug will slide right out the front.



## Glove Box Lock

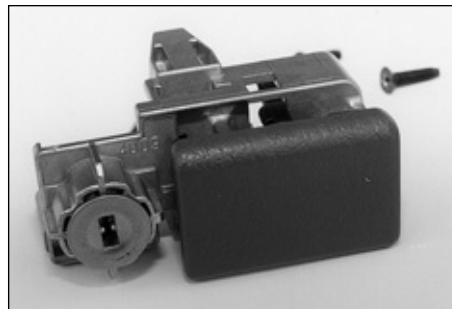


**25.** The RX300 has a glove box lock mounted in the glove box door.



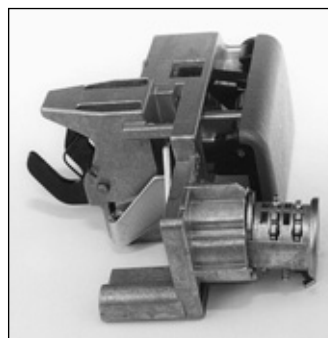
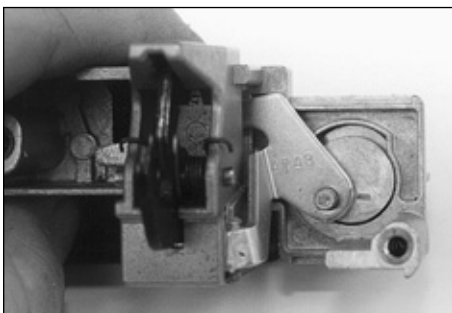
**26.** The glove box lock can be detached by removing the 2 screws on the inside of the door.

**27.** The square plastic trim cover has to be unsnapped from the face of the glove box lock assembly.



**28.** Removing the trim exposes the cylinder plug.

**29.** On the rear of the lock cylinder plug is the spring retainer.



**30.** Depress the retainer and slide out the cylinder plug. The plug contains 8 tumblers, 4 right and 4 left in positions 2 through 5.


## Making First Key

- Remove the hatch lock and disassemble the cylinder.
- Decode the cylinder to get all the cuts for a complete key.
- Use Space & Depth Guide keys to generate first key.
- Replace ECM and program new key.

## Programming Additional Keys

- Place an already programmed Master key in the keyway. (Do not turn on.)
- Press the gas pedal 5 times.
- Press the brake pedal 6 times.

- Pull out the key.
- Insert the new key but do not turn on.
- Press the gas pedal just 1 time and wait until security light stops blinking. Should be about 1-minute.
- Remove the key and press the brake pedal 1 time. The cycle is now closed. The programming mode will end after 10 more seconds.

**In the next installment we will conclude by covering the door lock servicing procedures. **



# Security Door Controls Entry Check<sup>TM</sup>



by  
Richard Allen Dickey

## Part I *An Inside Look At The E72*

Security Door Controls (SDC.) is an international marketer of over 200 security products. Their products include digital and card access control, electric strikes, electromagnetic locks, power supplies and a full line of accessories.

SDC has over 40 independent sales offices to service domestic and international accounts. Their products are channeled through contract and wholesale hardware distributors, security and access control dealers, as well as Original Equipment Manufacturers (OEM.). SDC products are sold through over 200 distribution centers worldwide. Lets take a look at one of their electronic entry locks.

The E72 EntryCheck<sup>TM</sup> is a Grade 1, stand alone, door lock and access control system. The base model is capable of handling up to 64 users. It is designed for easy installation and long reliability. It can also accept software upgrades while still on the door.

The lock is powered by four AA batteries that will last for several years of normal use. The E72 is available in three different models with a list of options. The standard configuration is 626 dull chrome,

galaxy levers with a standard ANSI 4-7/8" strike.

Let's take a look at the features of the E72.



**1. The E72 is shipped in a form fitting plastic lined box to prevent damage.**



**2. The standard Galaxy Levers are available with a cylinder, without a cylinder and interchangeable core.**



**3. The inside housing holds the battery and lever.**

### Features:

- Extra Heavy Duty Cylindrical Lockset.
- Field upgradeable memory to 300 users.
- Unique 16 button alphanumeric keypad.
- 3-9 PIN code length.
- All weather, heavy duty, Grade 1.
- Heavy duty keypad construction and reliability.
- Fits standard door preparation with the addition of a single 3/4" (19mm.) conduit through hole.
- Hardwire capability.
- Interchangeable Core (IC.) compatible.
- Non-volatile memory.
- Highly secure proprietary IR data transmission.
- Battery life - 150,000 cycles. (4 AA Batteries.)

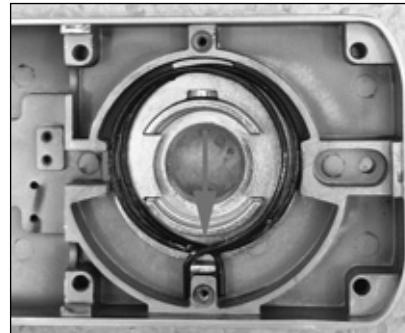
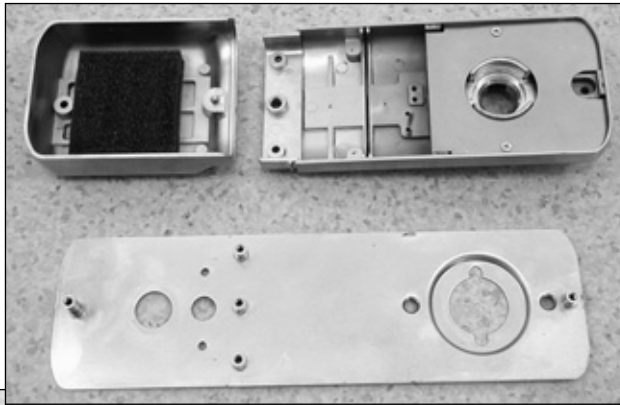
Like usual, I am interested in what makes the lock work, so I took it apart to get a better look at the goodies inside. The first thing I noticed when opening the box, was a plastic liner that is molded to fit all of the components of the lockset. (See *photograph 1.*) It does a very good job.

The levers shown are the "galaxy" design and supplied with or without a 6 pin "SC1" cylinder. (See *photograph 2.*) Levers that support standard interchangeable cores are optional.

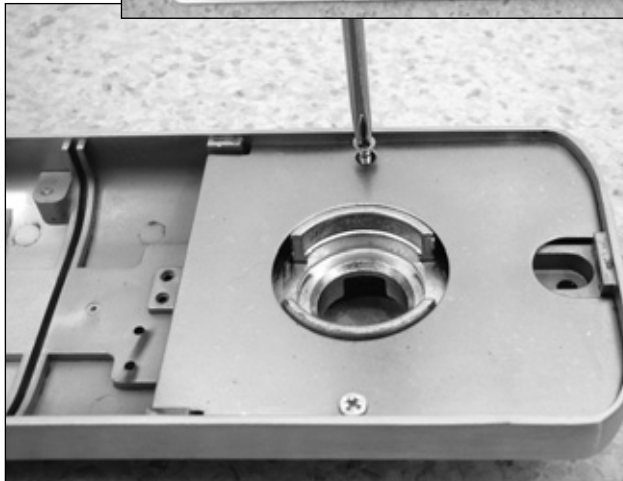
The interior housing consists of three main parts. (See *photograph 3.*)



4. There are three main parts of the inside housing.



6. The lever return spring can be accessed with the cover removed.



5. The lever return spring cover is held in place by two screws and contained in the lower half of the inside housing.

There is a back plate, a battery compartment and the inside lever return spring assembly. (See photograph 4.) The return spring cover is held in place by two screws (see photographs 5) and holds the lever return spring in place. (See photograph 6.)

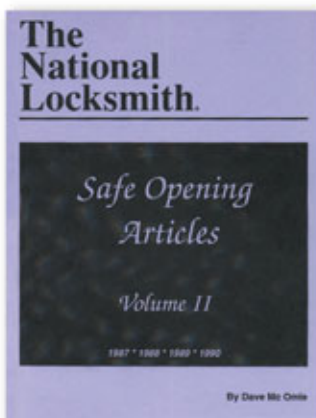
The outside housing is supplied with a gasket. (See photograph 7.) It is held in place with double-sided tape. There is no reason to remove the gasket,



7. The outside housing is supplied with a weather gasket.

Continued on page 48

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#SDBS - 1



**Continued from page 45**

but I wanted to dig a little deeper. Removing the gasket reveals eight screws. Two of the screws are hidden by the serial number tag. (See photograph 8.) Don't remove this tag. You will need the serial number later when setting up the lock.



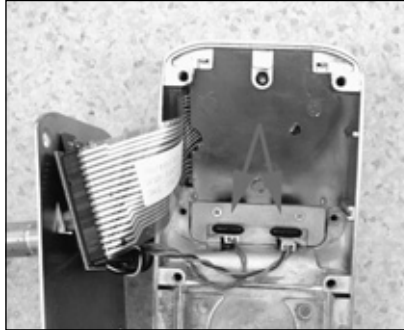
**8. There are 8 screws that hold the back plate to the housing.**

The outside lever return spring is the same type as used for the inside lever. The upper part of the housing holds the keypad and associated electronics. (See photograph 9.) The keypad is not of the usual variety. This one is a 16 key keypad. All of the usual numbers and symbols are there as well as the letters A, B, C and the SDC symbol. We will go through the purpose of all of the keys later.



**9. The keypad is of the 16 key variety and very tough in design.**

When the eight screws on the rear of the main housing are removed, the cover will lift off exposing the insides. (See photograph 10.) The arrows point to the two infrared connections. These are used to pass information to the lock as well



**10. The two infrared connections used to receive and transmit information to the handheld device.**

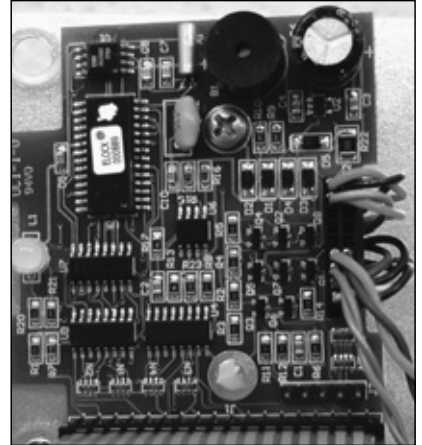
as retrieve information from the lock. This is done with a handheld infrared data transmitter/receiver. (See photograph 11.)



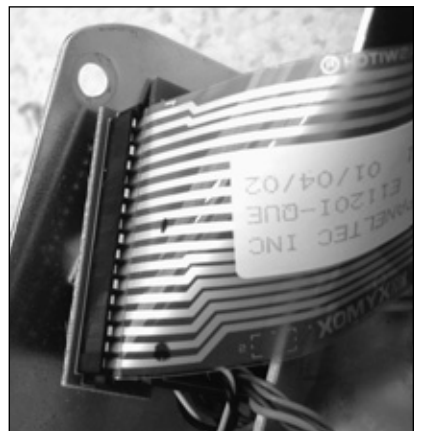
**11. The hand held IR device has two matching infrared connections.**

Photograph 12, gives a good view of the circuit board. This is where the buzzer and the wire connections are located. The connection that goes to the keypad is a flat, printed circuit type cable. (See photograph 13.) There is no reason to go this far inside the lock unless the factory asks you to, but if you are like me, you've just got to see.

The lock assembly (see photograph 14) and spacers (see photograph 15) are attached to the outside housing before installation.



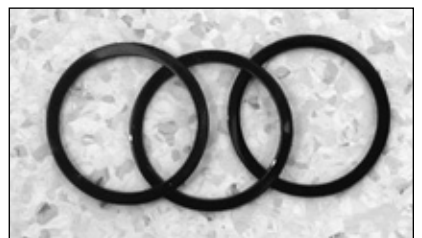
**12. The circuit board is located in the outside housing.**



**13. A flat printed circuit type cable is used to connect the keypad to the circuit board.**



**14. The actual lock assembly looks like any other until you notice the wires.**



**15. Three spacer rings are provided.**





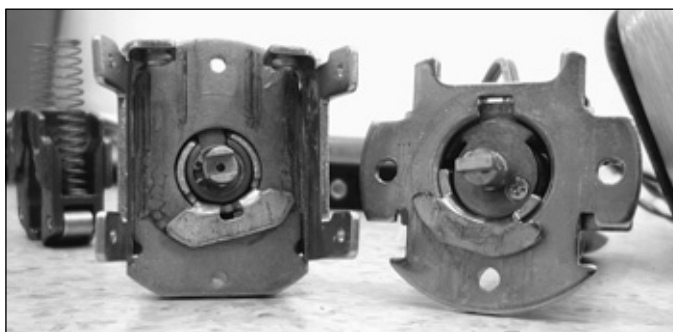
**16. The spacer rings fit between the outside housing and the lock assembly.**

(See photograph 16.) The spacers are used to properly adjust for door thickness.

The lock assembly houses a small electric motor that engages and disengages the outside lever. The motor is in the inside half of the lock assembly. (See

photograph 17.) It drives an engagement mechanism that is located in the outer half of the lock assembly.

While the E72 seems to have a few more features than most other locksets that are in the same category, it also has many similarities. To start with, the



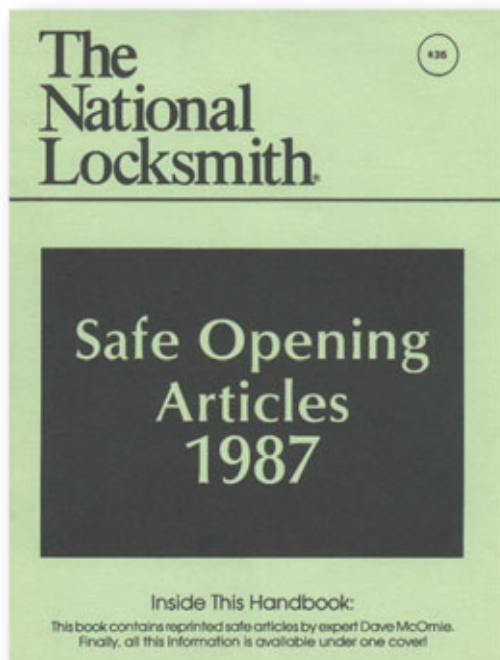
**17. The small motor unit is located in the right half of the assembly while the actuator is located in the left half.**

E72 can be programmed directly from the keypad on the lockset or through an infrared handheld device that works in conjunction with a computer. The hand held infrared data transmitter is very convenient and is required if retrieving an audit trail.

The computer requirements are as follows:

- PC with a 486 processor or higher. This means that you can use just about any PC that has been made in the last seven or eight years.
- You will need Windows® 95 or NT workstation 3.51 with service pack 5 or later.
- Microsoft Excel®.

The computer software is installed like any other Windows based software. It is also started like any other. However there are a few differences from here. Just a moment ago I mentioned that one requirement was the use of Microsoft Excel. The SDC program is designed to run within Excel. There is nothing wrong with that, it is just different than the others.



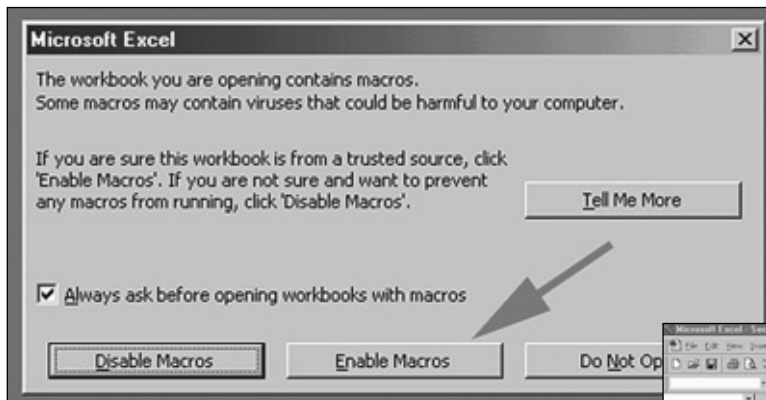
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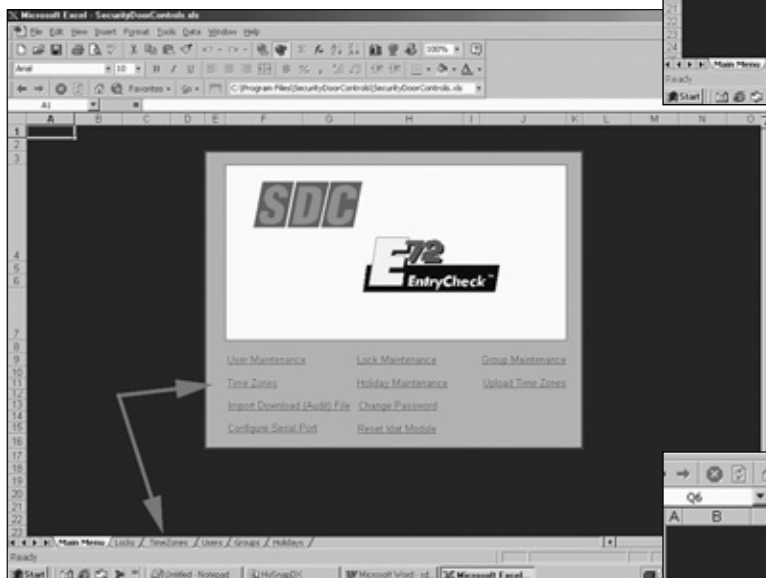
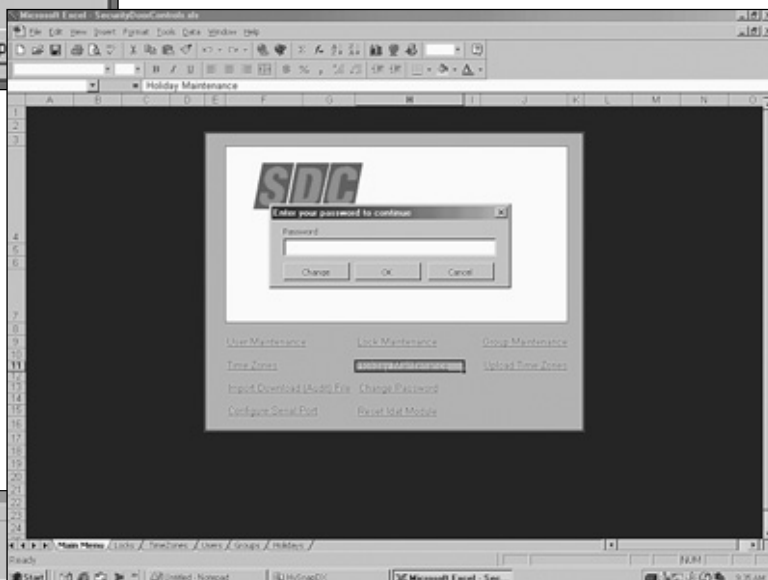
**18. When the E72 software is started, a "macro" warning appears.**

determine fail safe or fail secure, user ID with pin or just pin and some other great stuff like dual code access. (See photograph 21.) There are so many programmable features that I think I should show you the whole list, so here it is:

- Keypad and computer programmable.

When the program is started, you will get a warning that the file contains "macros" and do you want to disable them. (See photograph 18.) You need to choose "enable." The next step is to enter a password. (See photograph 19.) The default password is provided in the documentation. The password is easily changed from the main menu.

**19. The next step is to enter the password.**



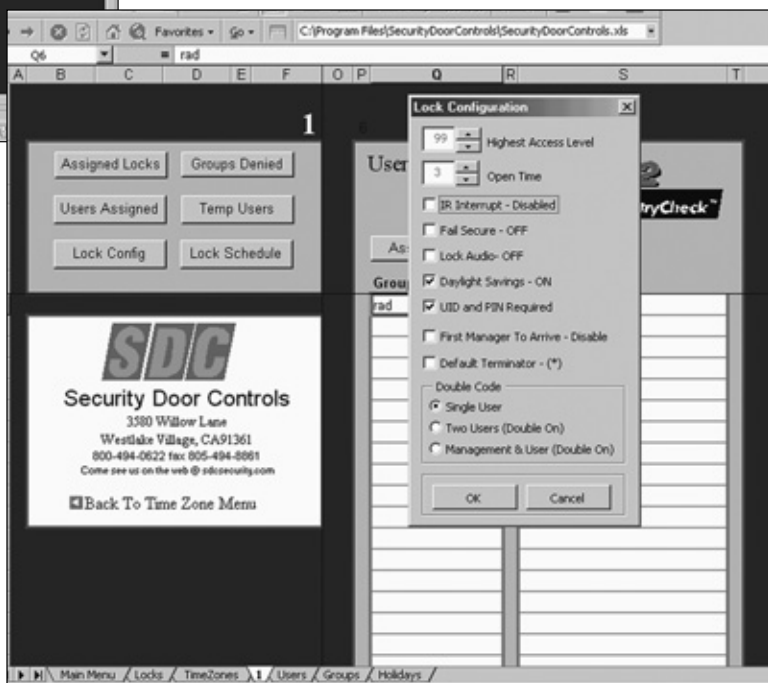
**20. The main window has two ways to get to different sections of the program.**

- 9 management levels for total flexibility.
- 99 user groups.
- Unlimited time zones.
- Individual users and user groups may be assigned multiple time zones.

For those that are familiar with Excel, the main window should make you feel very comfortable. There are page tabs along the bottom of the screen that can be used as well as the words displayed on the main screen. (See photograph 20.)

All of the programming features are easily accessed. You have the typical ones like time zones, groups and users. I liked the "lock configuration" found in the "time zone" section. The lock configuration allows you to

**21. The lock configuration window shows some of the high versatility of the E72.**





- First manager to arrive. Restricts access of personnel as PIN's are disabled until manager arrives.
- 1,800 scheduled events and holidays and multi-year scheduling.
- Single use codes or temporary time use codes.
- Individual user ID#.
- User ID + PIN or PIN only entry.
- User ID# Length 3-4 digit.
- User PIN Length 3-6 numeric, alpha numeric & multiple simultaneous key depressions.
- Double Entry, 2 PIN codes required for maximum security.
- Access timer 1-9 seconds.
- Sustained and timed passage manually enabled at lock or scheduled.
- Select fail-unlock or fail-locked.
- Audio on or off.
- Assignable lock ID number.
- Keypad Lockout.
- Standard Time always or automatic activation of Day Light Savings Time.
- Low battery indication.
- Adjustable date format M/D/Y or D/M/Y.

Well, it's time for me to play a little, so we will do an actual installation and lock setup in the next article. Until then, have fun. If you don't, somebody else will!

If you would like more information on the E72 EntryCheck™ or any other products from Security Door Controls, give them a call at: (805) 494-0622; Fax: (805) 494-8861. Web: [www.sdcsecurity.com](http://www.sdcsecurity.com) E-mail: [service@sdsecurity.com](mailto:service@sdsecurity.com)



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# Quick Entry

## UPDATE

by  
Steve  
Young



TECH TRAIN PRODUCTIONS

### 2002 KIA SEDONA

The Kia Sedona was introduced last summer as an entry-level mini-van for young, cost conscious families. (See *photograph 1.*) As such, it's been a huge success. Sales of this small mini-van have been brisk and they seem to be popping up like mushrooms after a summer rain in my area.

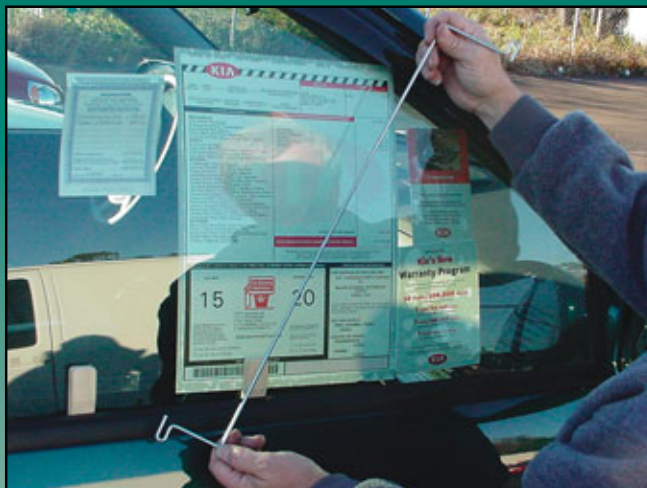
Like most of the new crop of mini-vans, this one is equipped with two sliding doors, one on each side of the vehicle. Each sliding door is equipped with a very large window. When the door is closed, the forward edge of this window rests squarely against the rear edge of the front doors. Because of the placement and size of the window glass in the sliding door, there is no safe place to rest a door-jacking tool, such as the Jiffy-Jak Vehicle Entry System. This effectively eliminates the use of that type of tool on the Sedona. Fortunately, this is one new vehicle that is refreshingly easy to unlock with conventional "inside the door tools."

To unlock the Sedona, I will be using the Tech-Train 1008 tool. (See *photograph 2.*) Begin by wedging open a gap between the weather-stripping and the base of the window, directly above the forward edge of the outside door handle on the front door. An inspection light can be inserted into the door to locate the linkage visually, but I found that the linkage was very easy to locate by feel.

Next, insert the short end of the Tech-Train 1008 tool into the door and lower it until it is just below the level of the outside door handle. (See *photograph 3.*)



1. The 2002 Kia Sedona.



2. The  
Tech-Train  
1008 tool.

3. Insert the  
short end of  
the Tech-  
Train 1008  
tool just  
below the  
outside door  
handle.





Rotate the tip of the tool until it is pointed away from you, and then slowly pull up on the tool until it stops. At this point, the tip of the tool should be hooked around the horizontal portion of the inside lock control linkage rod. (See *photograph 4.*)

Notice in the photograph that the horizontal portion of the linkage rod is relatively short and bends upward just forward of the point where the tool contacts the linkage. For this reason, it is important to properly position the tool as closely as possible to the forward edge of the outside door handle. The inside surface of the outside door handle assembly can also be seen in *photograph 4.*

Once the tool has hooked onto the linkage rod, twist the top of the tool to bind the linkage, and then lever the linkage rod forward by moving the handle of the tool toward the rear of the vehicle to unlock the door. If you have trouble locating the linkage rod by feel, an inspection light can be used to locate the linkage rod visually.

The vertical portion of the linkage rod can also be attacked with the TT-

#### Quick Reference Guide

##### Vehicle:

2002 Kia Sedona

##### Direction of Turn (passenger side):

Clockwise

##### Tool:

TT-1008 (short end)

##### Lock System:

Kia 8-Cut system

##### Code Series:

Y2001 - Y3000

##### Key Blanks:

Ilco/Taylor: X253; Curtis/EZ:  
KK3; Jet: KK3-NP

##### Bitting:

Ignition 1 - 8, Doors 1 - 8,  
Trunk 1 - 8



**4. The tip of the tool hooked around the inside lock control linkage rod.**

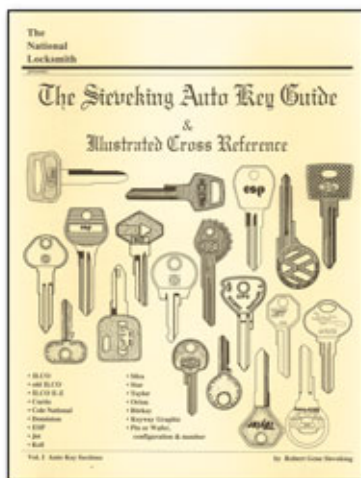
1008 tool, but this method is not nearly as easy as attacking the horizontal portion of the linkage. To attack the vertical linkage, insert the tool as above, but position it as far to the rear as possible in the inside skin of the door. Slowly slide the tool upward until you feel it contact the bend in the vertical portion of the linkage. Once you are hooked around the linkage, twist the handle

of the tool in order to bind the linkage, and then push down on the tool to move the linkage rod downward and unlock the door.

For more information on Tech-Train products call: 800-356-0136; Fax: (850) 476-7410; E-mail: Techtrain@techtrainproductions.com; Web: www.techtrainproductions.com.

TRL

## Sieveking Auto Key Guide

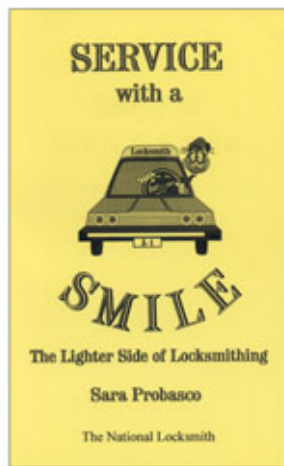


The Sieveking Auto Key Guide lists over 2,600 automotive and motorcycle keyways, covering makes from Acura to Zundapp, and listing fourteen popular key manufacturer numbers.

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#AK - 1

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## 2001 Reader's Choice Awards

**T**here's a lot of hype in our industry regarding who's on top and what company has the best product or tool to use in a specific application. The best way to measure personal preference is to ask our readers what their favorites are, and the best way to get a handle on that is to look at what items in the pages of *The National Locksmith* have generated the most interest over the year.

The following products were among the top interest producers in the industry, as determined by overall lead inquiries generated by readers of *The National Locksmith* in 2001. This is a select group consisting of only 10 manufacturers. Of all the editorial leads generated from readers of *The National Locksmith* during 2001, the products below received the most requests for information.

### **Ford Quick-On Ignition Removal Kit by AABLE**

The Quick-On will allow you to turn all Ford 10 cut ignition cylinders to the on position in less than 60 seconds, without any damage to the housing. The Quick-On works on all Ford, Lincoln and Mercury locks. It is made of hardened tool steel. The guide key has a built in steel ball bearing, which locks into the detent hole in the sidewall of the tool. When the bearing drops into the detent hole, the key will hit the tool into the face of the lock. This enables you to locate the exact location where the two cutting tabs will cut into the face of the lock.



There is only one location where these tabs can penetrate the face of the lock, thereby allowing you to get the torque power you need to turn the cylinder to the on

position, while shearing the sidebar. Just push in the retaining pin, the lock will slide out, and then replace it with a new one. Fast, clean, easy. Complete step by step instructions with photos.

### **Tamper Resistant Screwdriver by Keedex**

The Keedex Tamper Resistant Screwdriver comes with eleven interchangeable tips. It includes the following: Six tamper resistant torx tips (T10, T15, T20, T25, T27, & T30), three tamper resistant hex tips (5/32", 3/16" & 8/32"), and two spanner tips (#6 & #8). All of the tips fit into the screwdriver's storage handle. The Keedex Tamper Resistant Screwdriver is invaluable for automotive work, access control, commercial and institutional locksmithing. Keedex is also now stocking many different styles and sizes of tamper-resistant fasteners, appropriate for the needs of security professionals.



### **Hole Saw Alignment Guide by Tri City Lock Co.**

How do you re-drill a door that won't accept a drill fixture? The Hole Saw Alignment Guide solves this

**Continued on page 58**



**Continued from page 56**



problem. This Guide is fast and easy to use and eliminates the set-up time to put a drill fixture on a door. You can drill twenty doors using the Guide in the time it would take you to put a drill fixture on five doors.

The Guide is made of steel. It's the only tool you'll need to make a 2-1/8" hole fit where a 1-1/2" hole was.

### **Power Push Tool by High Tech Tools**

The High Tech Power Push Tool is designed to open vehicles with cabled linkages that have little or no room to



insert an inside access (under window) tool. The Power Push tool slips in between the doorframe and the car body. Using a special shield, the tool can be inserted without bending or prying the door. Once inside the vehicle, special control cables

allow the tip of the tool to move, to push the electric door lock button.

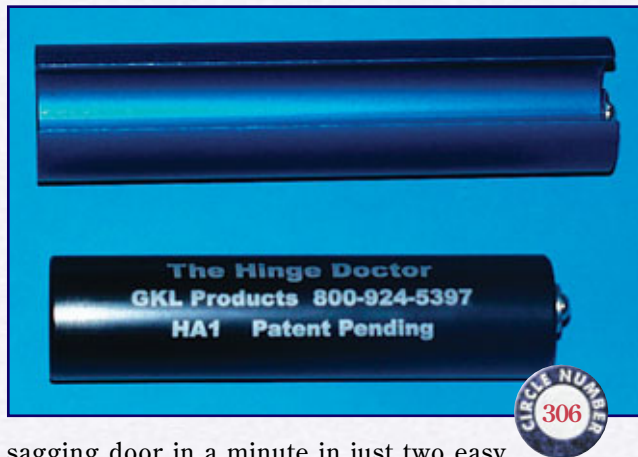
### **Key Blanks by Jet**

Nine new key blanks have been introduced by Jet in their Catalog Supplement No. 498.19. They include BL1-NP Bell, CLP-NP Clopay, EZ1 LSDA, M1-RV Master, CO-K W1 Kwikset keyway - Corbin bow, M1-IMP Import type Master Locks, K7-NS Arrow large bow, 275RF-NS Sargent 5 pin RF keyway, 275RG-NS Sargent 5 pin RG keyway.



### **Hinge Doctor by GKL**

Did you ever have to file a door strike because the latch is suddenly below the strike hole? Or the top of the door is hitting the doorframe? Well put away that file and you won't need to remove the hinge to bend it back in your vise either. Just use the new "Hinge Doctor" tool. It will fix that

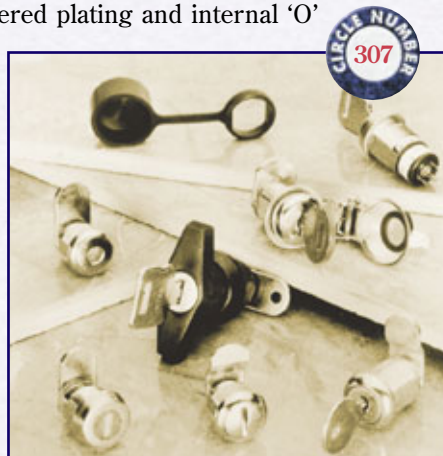


sagging door in a minute in just two easy steps. Just slide the tool over the hinge while the door is closed, hold it there with one hand while you open the door with your other hand. The door will start to bind and will feel springy, continue pulling the door open another few inches or so. At this point, if it's a hollow metal door, you're realigning the hinge mounting plate, or if it's a wood door, the hinge will start bending back to its original shape.

### **Weather Resistant Locks by Illinois Lock**

Illinois Lock Company is proud to announce their new UL/NEMA tested weather resistant series of locks. Designed for NEMA 4 applications, these locks withstand harsh environments with stainless steel keyway/dust shutters, bezels, triple layered plating and internal 'O' rings, and are manufactured to operate after 500 hours of salt spray testing.

Various brass tumbler mechanisms are available, including the famous DUO tumbler mechanism. Offered in Cam Lock and Knob Lock



keyed and keyless styles. A number of weather resistant switch locks with optional potted wiring harnesses are also offered. All of the above described locks are available in both standard and weather resistant designs.

### **Dickey-Bit by Richard's Locksmith Service**

Richard's Locksmith Service has come up with a quick and inexpensive solution for enlarging a 7/8" latch hole to the more common 1". The answer is the Dickey-Bit. How many of you have been on the job replacing an older lockset, only to find that the new latch will not fit in the existing hole? I will bet we all





have. The most common fix for this problem is a wood file, a rasp, a reamer, a pocketknife, etc. These different methods will work, but take a lot of time and do not produce a perfect job.

The Dickey-Bit is designed to be self-aligning and makes a perfect 1" hole. The Dickey-Bit works like a typical spade bit but has a modified front. The modification allows the front of the bit to fit in a 7/8" hole while the rear of the bit is a full 1" in size. The front of the bit, being smaller, will guide the bit while the larger portion of the bit enlarges the hole.

### Titanium-Reinforced Padlocks by Master Lock

Master lock has just reinvented the padlock. It is introducing an innovative patented titanium-reinforced padlock that is not only as tough and dependable as Master Lock's traditional locks, it's also sleek, attractive and contemporary in design. The high-performance Titanium Series locks, which will be in stores across the



country in July, are unlike any other currently on the market, both in looks as well as features consumers will appreciate. Some features include: Strength, they're the first locks to use titanium,

recognized for adding strength and durability to precision products without adding size or weight; Security, the hardened-steel shrouded shackle is bolt-cutter tough. Titanium Series locks accommodate the same home/yard, automotive and sportsmen uses as traditional padlocks, and fit most hasps, cables and chains; Weatherability, the Titanium Series locks are made from stainless steel and other non-corrosive components. When not in use, a weather-tough patented sliding keyway cover keeps dirt from jamming the locking mechanism.

### LOX-OFF™

There is a great new tool out called LOX-OFF™. It is a drilling jig used to drill open all kinds of locks. It



can be used with padlocks, as well as key-in-knob locks and lever locks. It can be used to drill a shear line, a retainer screw or simply an access hole. It will hold your drill in perfect alignment while protecting your hands. It will also control the depth of the hole you are drilling.

LOX-OFF comes complete with a case and all of the accessories needed to use it in many different ways. Included in the kit is a 20-page manual full of information about how to use the jig, as well as where to drill and how deep to drill. The LOX-OFF clamping blocks are made of a high-density plastic. This makes them light and also protects the surface that it touches from scratches. **IRL**

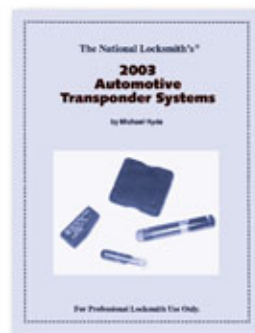
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#TS - 2003







By  
Sal Dulcamaro, CML

# KSP



KSP stands for Killeen Security Products. They are makers of cores, housings, supplies and tools for Best compatible interchangeable core products. The term SFIC is becoming more commonly used these days to describe IC products compatible with Best original style interchangeable core products. The abbreviation SFIC means Small Format Interchangeable Core. KSP has been making the small format I-Cores and supplies for more than 15 years now in Worcester Massachusetts.

### Small Format I-Cores and Housings

KSP makes and sells a full line of small format interchangeable core products including 6 and 7 pin small format I-Cores and housings to match. *Photograph 1*, shows a 6 pin I-Core with three different type housings in the background. The housings include a padlock, a rim type housing (in the middle) and mortise housing at the right. Other



**1. A 6 pin I-Core with three different type housings.**

types of housings that you might see would include those that are permanent parts of various brand knob or lever handle type cylindrical locksets. Although KSP doesn't make housings that are the same as those built into specific brand knob and lever handle locks, the KSP I-Cores can still be used and installed into those types of housings.

*Photograph 2*, shows the basic layout of a typical housing and I-Core set. The housing at the left is of the mortise type and can be used in replacement of a typical keyed mortise cylinder to convert a mortise lockset to use small format I-Cores for faster and easier rekeying. The housing's cam must be matched to the particular lock.



**2. The basic layout of a typical housing and I-Core set.**

The housing has a small profile "figure 8" shaped cavity that is deep enough to accept the 6 pin I-Core. While there are I-Cores of either 6 or 7 pin length, similarly there are housings designed to accept them. A

housing that is only deep enough to accept a 6 pin I-Core will not allow you to install any 7 pin length I-Cores. In contrast, an SFIC housing designed for 7 pin I-Cores will typically accept either a 7 pin I-Core or the 6 pin (slightly shorter) variety. The key to accepting either length I-Core is the extra depth of the cavity itself, along with the two fixed drive pins within the opening of the housing that interacts with two deep holes drilled into the back end of a small format I-Core.



**3. The control key has retracted the lug.**

I won't go into the specific theory and internal mechanics of the Best-style I-Core here, but the protruding lug in the side surface (in the middle of the "figure 8" shape) is what normally secures an I-Core within the cavity of a housing. A special key called a "Control Key" is needed to operate a second shear line within the I-Core and draw in the lug for installing or removing the I-Core. In *photograph 3*, the control key has retracted the lug so the I-Core can

**Continued on page 62**



**Continued from page 60**

be inserted into the housing. The rotation of the control key is self limiting in that it can only move about 15 degrees clockwise until the lug is fully retracted. The control key is not an operating key and can't turn far enough to actuate the specific locking device, whether it is a padlock, deadbolt or any other type of lock. Its operation is just enough to retract the lug to allow removal or insertion.

After full insertion of the I-Core in *photograph 4*, the control key



**4. Full insertion of the I-Core.**

can be turned back counter-clockwise to the original key insertion position (approximately 12 o'clock on a clock face) to remove the key and secure the I-Core in that specific housing. Once installed, the I-Cores will mostly operate like typical pin tumbler lock cylinders. They can be keyed alone or matched to other I-Core keys, and they can also be master keyed.

*Photograph 5*, shows all three types of housings with I-Cores installed. All three of these housings used fixed type drive pins within the housings as actuating pieces. KSP I-Cores can be used in other small format housings that don't necessarily use the fixed drive pins as actuators. Many of those will use a tailpiece adapter in place of fixed drive pins. Since 6 or 7 pin I-Cores are typically used, the length of the tailpiece adapter will be different for each size I-Core. If you switch from 6 to 7 pin I-Core (or vice versa) with that type of housing, you will need to switch tail pieces to account for the length

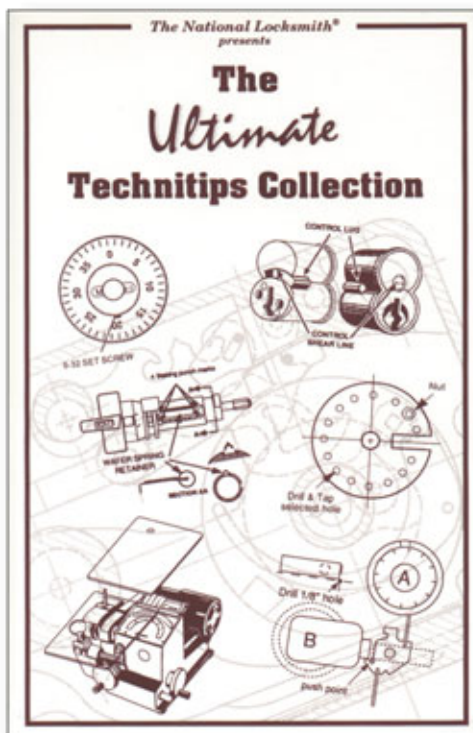


**5. All three types of housings with I-Cores installed.**

change. This is not a problem for KSP products, adaptable tailpieces are available.

### **The KSP Product Line**

KSP makes small format I-Cores in the following Best lettered keyways: A, B, C, D, E, F, G, H, J, K, L, M and Q. I-Cores from KSP are also available in the following Arrow specific small format keyways: 1C and 1D. KSP has its own brand specific keyway too. The KSP keyway is identified as KMT300. All of these I-Cores are made in both 6 and 7 pin lengths,



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#TIPS - 2



and can be keyed into existing key and master key systems where I-Cores from other manufacturers (providing that the keyways match) are already preinstalled. KSP does not make I-Cores with keyways common to patented keys.

KSP makes rim and mortise housings that accept 6 or 7 pin I-Cores. The #306 mortise housing is 1-1/4" in length and will only accept 6 pin I-Cores. KSP's #307 mortise housing is 1-3/8" and will accept either 6 or 7 pin I-Cores. They also make a "#307 Long" housing which is 1-3/4" deep. For rim housings, KSP makes the #308 that will accept either length I-Core and the #308-6 which only accepts a 6 pin I-Core.

The housings are available in six finishes: Bright Brass (03), Satin Brass (04), Satin Bronze (10), Duro (10B), Bright Chrome (26) and Satin Chrome (26D). On the mortise housings, a specific cam has to be chosen although they can be changed later. The

cam choices are: 600/ Standard Cam (Yale type), 601/ Adams Rite, 602/ Clover Cam, 602-S/ Sargent Cam and 602-L/ Schlage Cam. KSP also makes two slightly modified mortise housings with tapered front ends also in the same finishes.

The housings previously mentioned used riveted cams and involve a bit of work to switch from one cam to another. KSP has recently introduced another line of housings that use screw mounted cams. The part numbers are nearly the same except the first digit changes from a 3 to a 4. So the equivalent part number for 306 becomes 406 and so on. The screw attached cams are similarly numbered. In that case, the first digit switches from 6 to 7. For example, #600 becomes #700.

KSP sells key blanks in all the keyways that coincide with I-Core keyways that they manufacture. Because the keys are tip stopped, the same keys can be either 6 or 7 pin style. You

don't need to buy two different length keys to coincide with the different length I-Cores.

#### Other Small Format I-Core Products

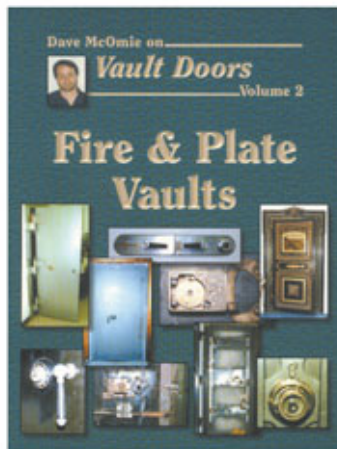
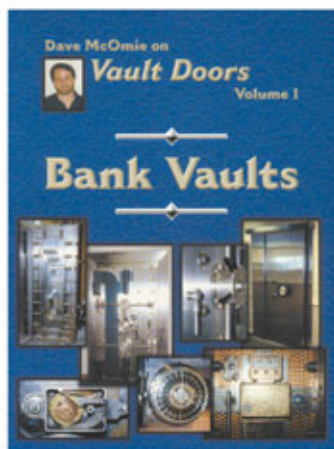
KSP also sells padlocks that accept I-Cores in three different shackle lengths: 1-1/8, 2, 3 and 4 inches. They all have a solid brass body that is 1-3/4" wide, 2-1/8" long and 7/8" thick. Shackles are case hardened chrome plated steel. Servicing tools like capping blocks and presses, staking tools and housing wrenches are also available.

The next time you are in the need for quality interchangeable core products at a fair price, KSP can deliver.

For more information contact your local supplier, or Doug Maston at KSP: 1-800-KSP-KEYS or (508) 798-3200; Fax: (508) 753-2183; E-mail: dmaston@iccore.com.

**TNL**

## Dave McOmie on Vault Doors Vol. 1 & 2



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# Beginner's Corner

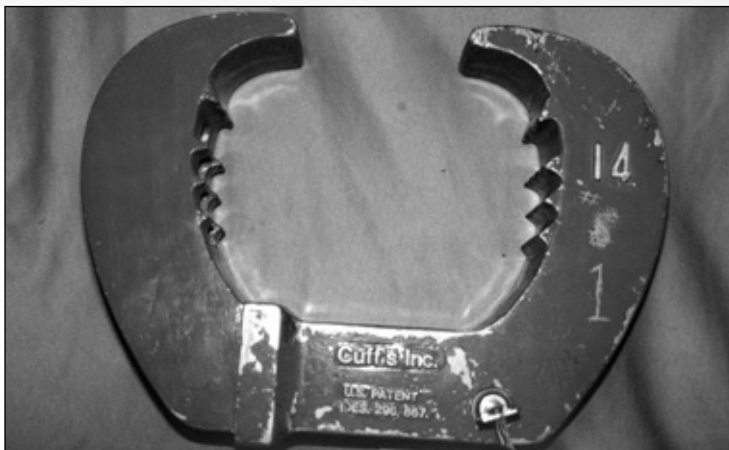


## Car-Cuff

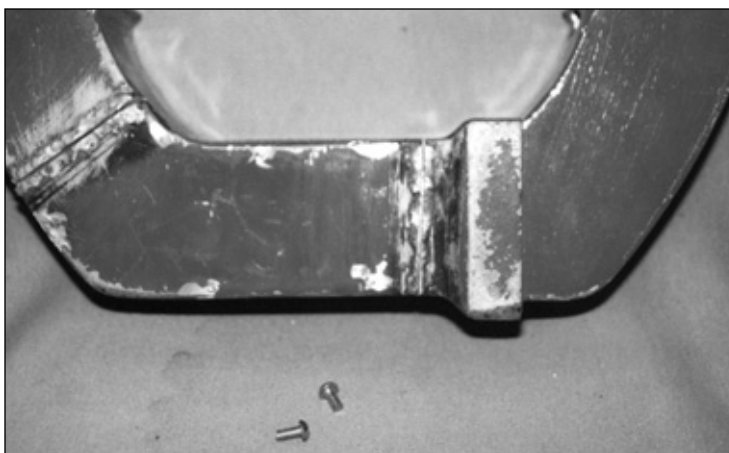
By Jim Langston

Car-cuffs are used widely by Universities and law enforcement agencies all over the country to prevent someone from driving a car away after a ticketed violation. It has become a very popular device used by just about every law enforcement agency, which forces an individual to pay the applied fine before they can move their car. It prevents people from just collecting violation tickets, stuffing them in their glove box and driving away. If you ever approach your vehicle and see a cuff locked on the front wheel, it is sure to get your attention.

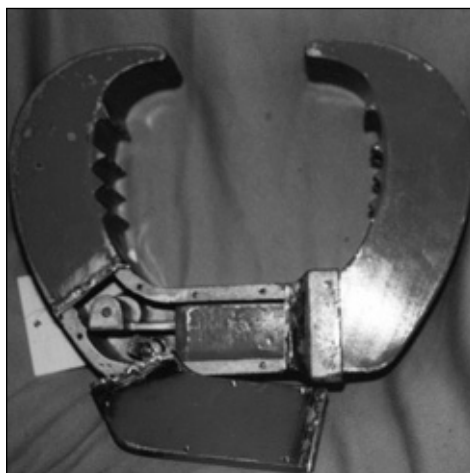
The purpose of this article is to explain how to take a car-cuff apart and repair it when the need arises. *Photograph 1*, shows the Car-Cuff by



1. The Car-Cuff by Cuff's Inc.



2. Notice two welds that secure a cover plate.



3. The cover plate removed.

Cuff's Inc., in the locked position. It is usually locked with either an ACE type lock or a Medeco lock.

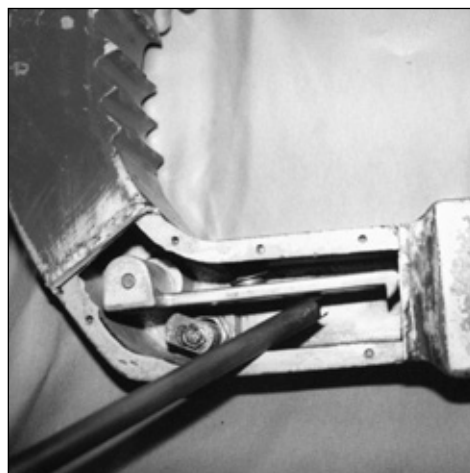
On the backside of the car-cuff you will notice two welds that secure a cover plate. (See *photograph 2*.) The car-cuff is made from a heavy aluminum alloy, so you will need to use a hacksaw to saw through the welds so you can take the back plate off.

Once the back plate is off, you can access the lock and

can for service repair or replacement. (See *photograph 3*.) Should you replace the lock, I recommend putting Lock Tight on the threads of the lock to prevent the possibility of it working loose.

Should you ever need to remove a malfunction car-cuff that is on a vehicle, or one with a missing key and you can't pick the lock, *photograph 4* shows the latching arm that would need to be lifted to release the cuff. As you can see, you can drill just about anywhere in the center of the cuff and insert a probe to lift the latching arm.

This is a rather simple device to operate and service, the hardest part is removing the back cover plate. Replacement of the cover plate can be done in one of two ways.



4. The latching arm.

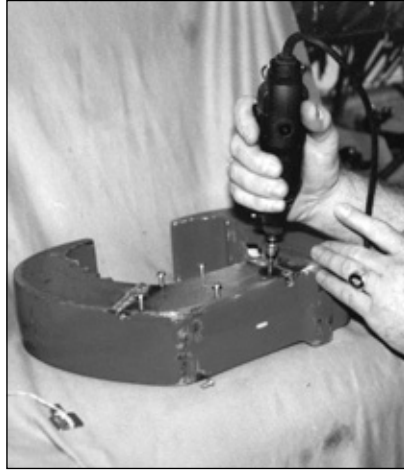




**5. Put screws through the plate and the car-cuff.**

The first of which would be to have it re-welded. This is not an easy task because the unit is made from aluminum and special welding materials and skills are needed to repair properly. I do not have the skills or tools to accomplish this task, so I opted for an alternative repair method.

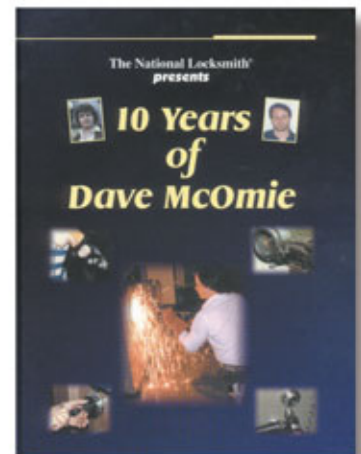
First drill and tap threads in both the plate and the car-cuff at the same time. To do this you may



**6. Cut the screws off flush.**

have to C-clamp the plate to the car-cuff. Then you can put screws through the plate and the car-cuff as you see my compadre Charlie Hunter doing. (See *photograph 5.*) Then cut the screws off flush with the car-cuff using a Dremel tool. (See *photograph 6.*) After cutting the screws, dress the screws down with a file so it will be smooth when it is painted. **TNL**

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#DM - 10

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\*\*\*\*\*  
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\*\*\*\*\*  
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by Robert Gene Sieveking

## Wafer Lock Reading

Easy to learn.  
No Codes needed.

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#WLR - 1



# The Lighter Side

Looking for Help in all the Right Places



by Sara Probasco

**"Is this the place where we can learn to open things?"**

The question came as a surprise, from a couple of grinning farm hands who appeared at our door one morning, several years ago. We were living in the Texas Panhandle Plains, at the time, and were hosting an area meeting of locksmiths with Bill Reed as guest instructor for the day. (See "Notes on a Barn Door" in my book, *Service with a Smile*.) It took a little diplomacy to convince those two that only professional locksmiths were invited to participate in the class, especially when they learned we were serving "free eats."

Apparently, their quest for knowledge wasn't unique. We had a similar encounter recently with a young woman who applied for a job opening with us. In an attempt to fill a service-technician spot at our store, we had run some ads in the local paper offering to train novices for that position. As you may imagine, we had a wide variety of applicants come by - more than a few were women, which was a bit unusual and surprising, to us. Most applicants were less than casually dressed, few had brought their own pen or pencil for filling out the application form, and several left a lot of blanks - especially the addresses and phone numbers of previous employers.

One young woman failed to fill in her driver's license information. When asked about it, she said she didn't have one. We told her driving would be required on the job. She said she'd get one, but it would have to wait a while, because she wouldn't be "of age" for another six months. (I guess I'm getting old! Some of these teenagers look like they're pushing thirty, these days!)

One of the questions we always ask an applicant is, "Why are you interested in this particular line of work?" Sometimes we're a bit surprised at the answers. Like the guy who said, "I figure if you teach

me to be a locksmith, it'll help me get a job in law enforcement in the fall." But the one that took the cake this time was the little gal who batted her eyes at Don and answered, "I just want to learn how to get into cars and things." At least they were honest about their motives. Need I say, neither of those applicants got the job?

Another who didn't get the job was an elderly lady who freely told us that she had a bad back and couldn't stoop, or lift, or be on her feet. Remember, we had advertised for a full time service trainee! We never did learn what she thought she COULD do.

I've heard it costs a small business between \$500 and \$1,000 to train a new employ, figuring the "down time" it takes someone (or several someones) to teach them all they need to know, plus the length of time you'll be paying the new person before they know enough to be productive.

It costs us a lot more than that. Say you start somebody at \$6.50 an hour, training wage. We figure it'll be at least a month or two before a novice can pull his/her own weight around the shop by answering the phone, waiting on customers, cutting keys, and doing simple re-pinning, and the like, on their own. Oops! That's \$1,125 - \$2,250, right there, not counting the "down time" of your trainer(s)!

At this point, we give them a fifty-cent raise.

Give them another month or two and they should be able to perform basic car openings and lock-pickings, that's \$1,213 - \$2,426 in additional salary. If they quit now - after 2 - 4 months, you're out \$2,338 - \$ 4,676.

Raise them another fifty cents, incentive to keep going.

Then, we find it usually takes a couple of months of "coasting" to cement those skills, before they're ready to move on up to the next

level. Now we add \$2,650, making the total, so far \$ 4,988 - \$ 7,326. Shall I go on?

Of course, by now, they're able to do a fair amount of work, independently, so it's not wasted money, by any means. However, there's still a lot they need to learn. After all, locksmithing is a complicated profession.

All in all, we figure it takes one to two years, depending on the person, for them to also become relatively proficient in making keys from scratch, setting up and installing master-key systems, servicing high-security lock systems, doing bank safe-deposit work, etc.. The rest comes gradually, over the years.

We've learned to play tough the first month or two. We try to find out what they're made of, how well they learn and apply their knowledge, how enthusiastic they are about working for us, etc., and if they don't measure up to what we really need, we cut them loose and try somebody else. We can't afford not to! Can you?

Of course, we don't always call them right. Recently, an employee of six months - hired primarily as a service-technician trainee to take after-hours calls every other week - decided the job wasn't for him, after all. Despite our early enthusiasm over him, we were coming to the same conclusion. Every time he was supposed to be on call, something would happen. His mother would get sick, or his wife would need him to drive her to San Antonio for something, or we'd try to call him and the phone "wasn't working right." Always something. Finally, he admitted he didn't want to be on call after hours, and he didn't like being urged to work faster. At the time, he was taking three and four hours to install a deadbolt, despite prior experience as part of a general-maintenance job with a large operation, and we'd had some complaints from customers that he took "all day" to do a relatively



simple job at their house or business.

I know our problem finding good workers isn't unique. A friend who owns a retail store in town recently complained to us that he'd hired and fired no less than forty high school graduates over a six-month period because they couldn't make change. He didn't have computerized cash registers to inform his workers the amount of change to give, and even after days of intensive instruction, they couldn't seem to catch on, so, one after another, he would finally give up and hire someone else. In the long run, he decided to stick with an older generation of workers who hadn't grown up with computers in the classroom.

We have five people working in our business. One is thirty-something, but none of the others is under sixty! Of course, this hasn't always been the case. In the sixteen-odd years we've been in business, we've had male and female employees from twenty to seventy-six, and they all brought with them attributes both good and bad. We've had some who didn't want to have to lay down their movie magazine to wait on customers, and some who would take all day driving six blocks to the post office for stamps. We've had some who were there before we were in the morning and racked up overtime every week, whether they were asked to, or not. Many had handwriting so bad it was almost impossible to make out the invoices they filled out, while others couldn't add 2+2 or make correct change if their lives depended on it.

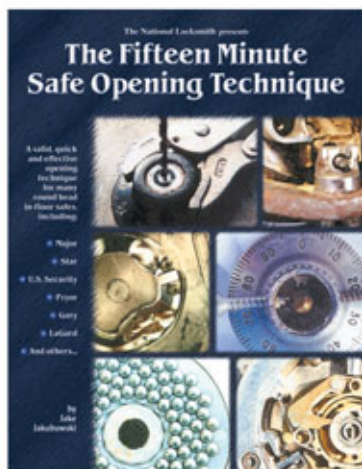
But the one who couldn't add spurred us to buy a computerized cash register, which has helped our record-keeping immensely. The one who took so long going to the post office taught us we could have stamps delivered to our door by the postman and save the time of going. We've learned patience, and efficiency, and anti-stress exercises that you can do at your own desk.

Most of all, we've learned how pricelessly precious are the faithful employees who hang in there through good years and bad, learning, teaching, and helping to strengthen and "grow" the business.

Of course, the most wonderful employee of all is the one who's able to put up with US, over the long haul.

Now, that's a true gift! **TNL**

## 15 Minute Safe Opening

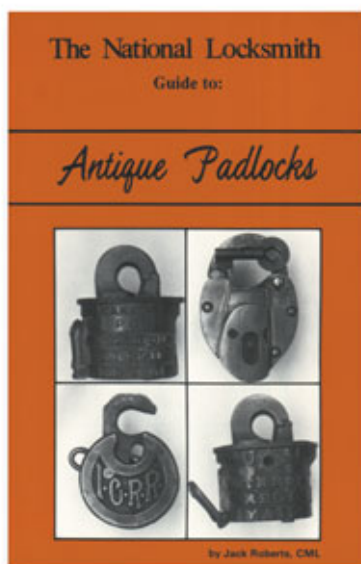


This book deals exclusively with round head lift out doors. Shows five ways to open a Major; three ways to find the Dog Pin on a Major; four ways to open a Star; four ways to open a LaGard style round head.

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## Antique Padlocks



Finally there is a book to give you all the information you need about old interesting locks.

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#PAD - 1



# SENTRY-Nomies



by Dale W. Libby,  
CMS

**T**his article is about opening Sentry Electronic Safes, and a new attitude that one must

take when dealing with a customer with a Sentry Safe. In this day and age, everything is disposable, at least on the low end. I used to repair VCR recorders. I took several classes to become proficient, and even expert. By the end of the class, I was telling my friends (customers) that it would be better to buy a new VCR rather than having their 'old' monster repaired. In many instances, even if parts were available, it would be cheaper to buy a new VCR with new bells and whistles than to repair their 2-year-old unit.

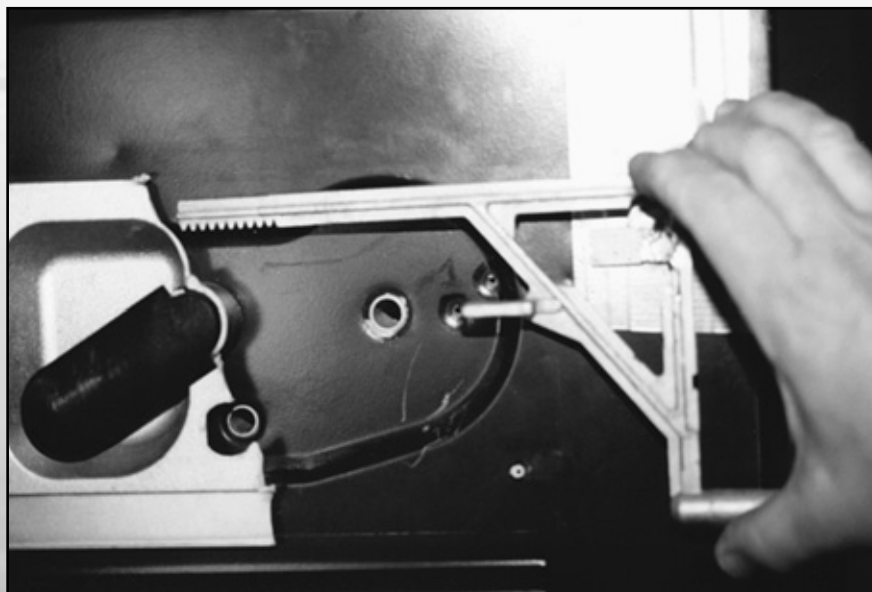
Sentry Safes perform quite well as a fire safe and offer a two-hour rating on their small units. Their walls and doors are made of plastic that does not rust, and will melt together with the body in a fire giving great protection. The units look good and come in both electronic and mechanical dial styles. I do not bother educating the customer anymore, unless they ask. I find many Sentry units in commercial settings that the customer uses to keep money in. I point this out to them casually by stating that this unit is a rated fire safe and not a money safe. This has little or no impact on a customer that went to a local discount warehouse and bought a "safe" for all seasons and reasons, for under \$200.00.

In my mind, I see a disposable safe. Price is not the object here. On many newer Sentry Safes, it is impossible to work on or repair them. In many cases it is impossible to take the units apart, either for service or combination

changing (mechanical) or work on the electronic parts. It is easier to replace the door to the unit than to work on the door with plastic clips and fasteners used to keep these units together. Parts, if you could get them, are impossible to replace and the hourly cost would exceed the price of the unit.



1. Typical Sentry A3807 series electronic keypad safe.



2. View of the locking bolt (X-ray). Then fence for the mechanical lock enters from 3:00 o'clock.



**3. Solenoid can be seen in the upper left, just above the mechanical fence of the wheeled lock (above the angled bar).**



I have been servicing a lot of these safes lately, and only had one problem on the first of a series that I worked on. It was an eye opener. Sentry makes a series of safes in many sizes. In *photograph 1*, is the electronic keypad model. There is also a mechanical dial model that this same door is used on. The door is prepped with both configurations possible. The key to identification is the handle and the small tubular push button lock.

The handle pushed down to open the door. The push button lock pops in and out to lock the handle. I will show you how this all works. If you have never worked on one of these units, your first thought might possibly be wrong about the placement of the drop in area of the wheel pack for the mechanical lock. This is why I had problems.

If you put pressure on the handle with the mechanical lock and dial unit, you can feel the wheel gates go past the fence, like on all older Sentry Safe units. This is still a direct drive unit. I thought that the fence was at 9:00 o'clock as all old Sentry Units had been to that point (with some exceptions in the newer models). Was I wrong when I drilled my first air hole and only saw the wheel pack and no fence. As we will soon see, the fence and drop in position is in fact at 3:00 o'clock on these large and small fire safes with the handle and pop out tubular key locks.

The secret to the positioning of the fence has to do with the handle being attached to a large plastic gear. Pushing down on the handle does not force a fence into the wheel pack by pushing, but by pulling it into the wheel pace from the opposite side. Once I realized this concept, it was easy to work on and open these units, usually in less than a minute.

In *photograph 2*, I have taken the

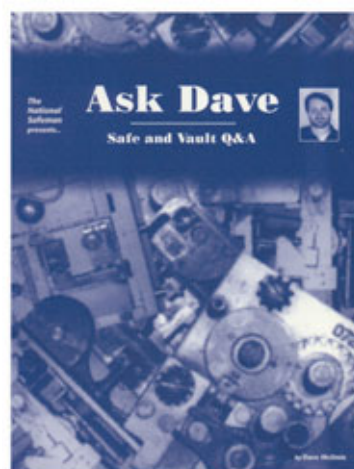
bolt from the inside of the safe and placed it on the door with respect to the position it is in when the door is locked. It is easy to see the gate at the 3:00 o'clock position with the gearing on the bolt bar. When the handle is pushed down, the bolts are moved to the left to open the safe. The gear also pulls on the left bolts and the top and bottom bolts. One movement of the geared handle pulls all the bolts of the safe on all four sides into the unit. A great feat of engineering! The solenoid bar is just under my forefinger, but impossible to make out in this photograph. You will see it better shortly.

Most customers who call me to open these units are looking for a low-ball price. Sentry has asked them to get at least three quotes for opening these units. When these units break, or are locked with no combination, I state that I can quickly open these safes and that there is no repair available. I tell them that it would be less expensive to replace the safe rather than to repair, even though repair is out of the question. When Sentry tells the customer that the safe must be drilled, then I drill it, even though spiking or manipulation might be possible. Drill and dispose.

This article will focus on the electronic keypad model with the push button lock. The mechanical opening is easy. Just drill at 3:00 o'clock or a little above it outside the dial ring. Careful, the dial is bigger than it looks under the plastic fascia plate. Drill and use either an otoscope or borescope to see the edge of the wheels. Dial open and prosper! In *photograph 3*, there are a couple of interesting things to notice. First, you can see the fence for the mechanical wheel pack and no wheels. This is on the angled bar between the bolts.

Just above and to the left is the solenoid that is the heart of the

# Ask Dave



You asked. He answered.  
This is safe and vault  
Q&A with an attitude.

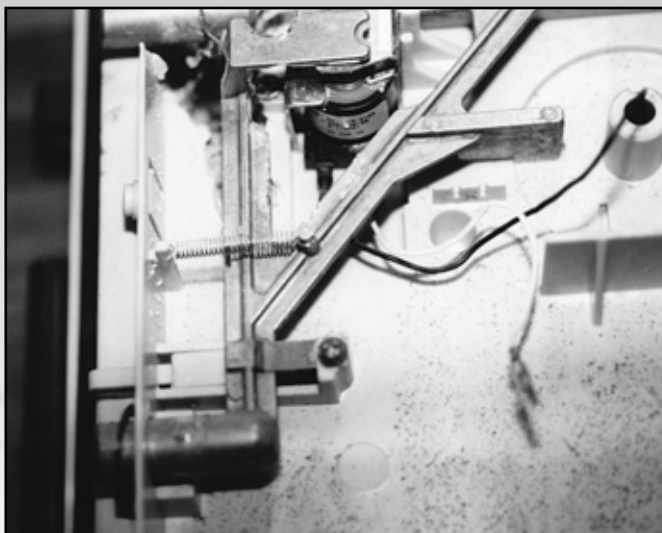
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#AD - 1



**4. Plunger on solenoid has been depressed and bolt work moved into the open position.**



electronic lock. It is pointing out at you with the solenoid bar to the left of it. It has a little moon shaped cut out on it. Hard to see, but it is there. Another feature seen here is the anti-keypad pulling wire device. There are two wires from the solenoid that enter through the door by means of the dial spindle hole. On this safe door, if you were to pull the keypad off the door, you would only get one wire through the door. The white wire is cut and a slip connection is used. When the keypad is pulled from the door, this wire breaks inside the safe door and you only have access to the black wire. If both wires came through the door, you could spike it easily with a 9-volt battery. With only one wire showing, you must drill to open the door.

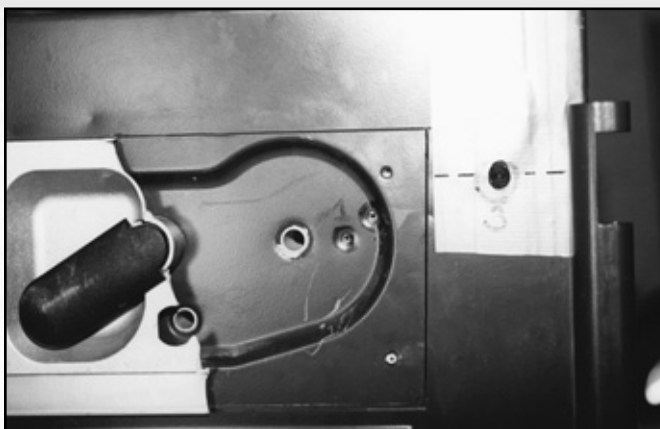
Yes, I know that I could spike the door open by peeling the keypad off. This would leave both wires free and connected to the solenoid, but the customer sees this and is not impressed with his unit. When Sentry says drill, I drill. Drilling is the sure way to open this lock. This particular unit was in a flood for about a week. The keypad would not work or beep at all. The solenoid did work as I later tested it, but if it did not, then drilling is the only option.

If I go to a bank to drill open a safe deposit box, I bring a battery-operated drill and use it to drill and pull the nose of the lock. Do I have to do this? No. If the customer is present I do not use a comb pick to get into the box. He wants security and he thinks if it must be drilled, he is more secure. If I am working at the bank alone, without customers being present, then I will use a comb pick to open the box. Make the customer feel more secure, and that he is getting his moneys worth. The bank is happy to get the boxes open, no matter the method.

*Photograph 4*, shows the electronic safe in the open position. The half-drilled bar has moved over the depressed solenoid and allows the bolts to be geared into the open position. You can also see that the fence for the non-present wheel lock has moved closer to the post for the wheel pack. The safe is open at this point.

I have opened at least a dozen of these units and am done in less than a minute. I leave the safe useable with just the tubular key lock being able to lock the unit. I do not

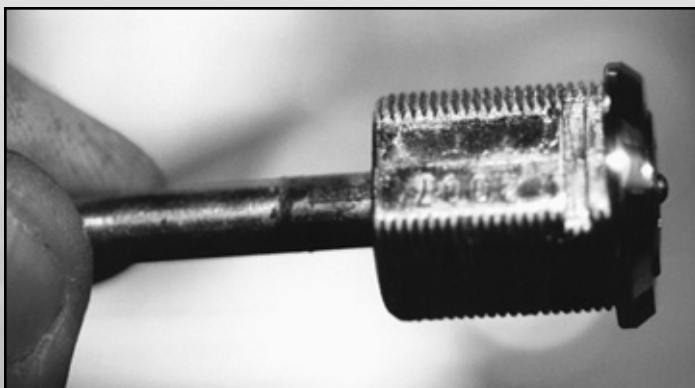
**5. Solenoid blocking bar drilling position. Drill halfway between the edge of the keypad and hinge, halfway up from top hinge leaf cutout.**



**6. Tubular keylock removed.**

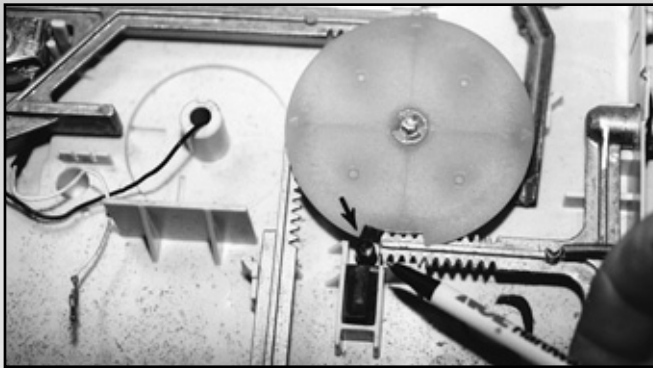


**7. View of the lock and tailpiece. The code on this lock was K007.**





**8. The end of the tailpiece blocks the movement of one of the bolts when extended.**



measure to open these safes, for the door measurements differ in height. I use the edge of the upper hinge cutout as my guide. (See *photograph 5*.) Halfway between the edge of the keypad and the hinge, and halfway between the upper leaf cutout is where I drill a 1/2" inch hole. I just eyeball this position.

Drill through the outer sheet metal into the insulation. The drill will meet free space and then hit the cast solenoid blocker bar. Continue drilling through this bar. Usually you will also drill through the back of the safe door. Now, angle the drill up and then down (ream up, ream down, like wax on, wax off) just a little. Remove the 1/2" drill and bit and reach over and pull

the handle down. The safe is open. This may take you all of a minute.

Wait, you say, the tubular lock is also pushed in and the door is still locked. The client does not have a key. What should you do? I can pick the lock, but then the patron wants me to make a tubular key for him. I do not do this. If I have drilled the safe, then I will drill or remove the lock entirely.

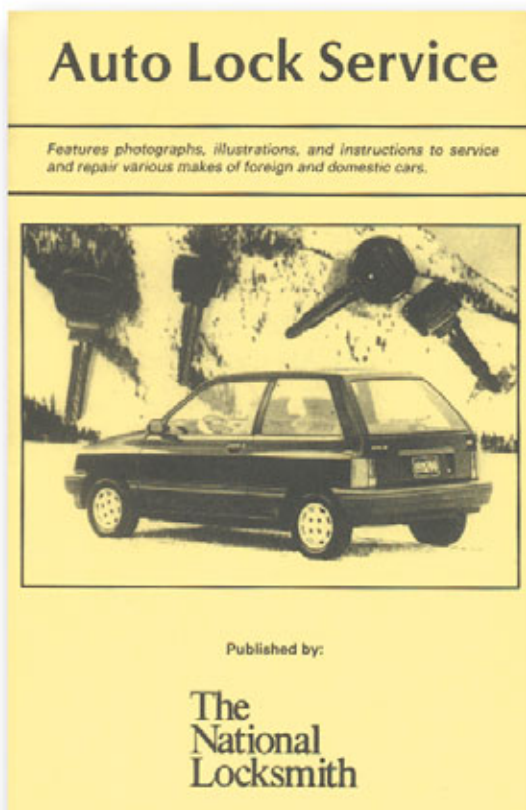
In *photograph 6*, we see the lock, tailpiece, and the clip that hold it in place. This is a cam lock type clip that holds the tubular lock in position. It is pushed up under the lock below the plastic fascia plate. The inner core of the locks moves in

and out to shift the attached rod or tailpiece. *Photograph 7*, shows this lock with the code number of K007. The end of the lock where the key enters has a raised nipple, just barely visible in the photograph.

The way this lock works is ingenious and simple. *Photograph 8*, gives the secret away. When the lock is pushed in, the tailpiece protrudes into the cavity for the geared bolt bar on the opening side of the door. (See the tip of my ACE pen.) It stops movement of this one bolt, which in turn stops the geared handle from turning, which keeps all the bolts locked. When the key is used, the bar pops out of this cavity giving free movement to the geared cam to withdraw all the wheels.

The door to these units can be removed by driving the rather large hinge pins from the door. They are silver in color. Drive the top pin up and the bottom pin down. These pins are rather large but will punch out easily.

In conclusion, remember that the mechanical lock's gates are at 3:00 o'clock, and so is the solenoid. The safe is disposable and not repairable. Drill open and prosper. **TNL**



# Auto Lock Service

Covers opening and service techniques.

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# Road Rally

A showcase of locksmith service vehicles.

If you think your vehicle has what it takes to be featured here, send photographs and descriptions to:  
The National Locksmith, Road Rally, 1533 Burgundy Parkway, Streamwood, Illinois 60107-1861.

**Owner:** Stan Hauer,  
Astoria, OR

**Model:** 1997 Ford  
Econoline



**Owner:** Greg Heeley,  
St. Louis, MO

**Model:** 1995 Chevy Astro

**Owner:** Frank E. Domanski,  
Dover, DE

**Model:** 1999 Ford  
F-150 Van



**Owner:** Ladiel Wood,  
Alcolu, SC

**Model:** 1987 Chevy  
Step Van



# THE CASH STATION

by Mark Daniel

## LeFebure TL-15

**Manufacturer**  
LeFebure

**Safe Model #:**  
Square door

**UL Rating:**  
TL-15

**Safe Size:**  
40" Wide by 40" High

**Door Size:**  
38" Wide by 38" High



**Handle Type:**  
L Style

**Handle Location:**  
15-3/4" Down by 7-3/8" right  
of opening edge of door.

**Handle Rotation:**  
Counter-Clockwise to open

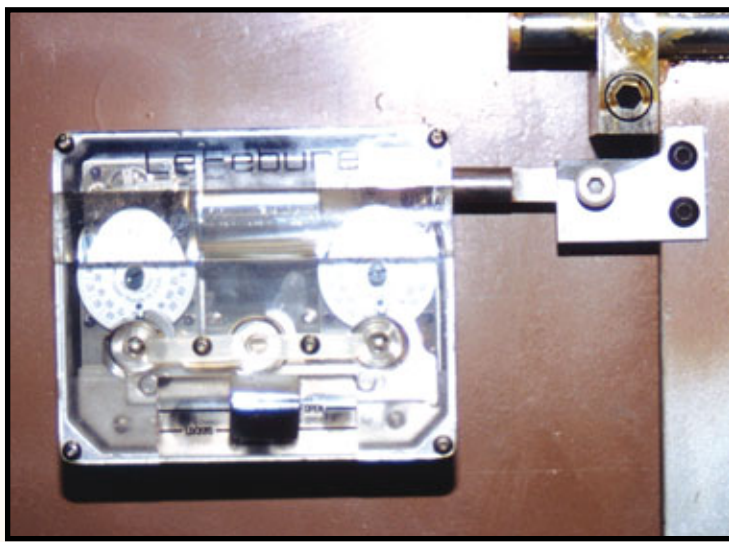
**Dial Center  
to Handle Center:**  
4"

**Dial Location:**  
15-3/4" Down by 3-3/8" right  
of opening edge of door.

**Number of Door  
Locking Bolts:**  
3

**Door Locking  
Bolt Locations:**  
9-1/2" - 19" - 28-1/2" Down  
from top of door.





## LeFebure TL-15

**Door Locking Bolt Diameter:**  
3/4"

**Door Thickness to Bolt Center:**  
2-3/4" From face of door.

**Door Thickness to Lock Case:**  
2-1/8"

**Door Thickness to Back of Lock:**  
3-1/4"

**Combination Lock Type:**  
S&G 6700 series

**Combination Lock UL Rating:**  
Group 2

**Combination Lock Case Thickness:**  
1-1/8"

**Number of Wheels:**  
3

**Driver Location:**  
Rear

**Combination Lock Handing:**  
Vertical Down (V.D.)

**Drop-In Location:**  
73

**Forbidden Zone:**  
0 - 20

**Combination Lock Opening Procedures:**  
4 times left to first number. 3 times right to second number. 2 times left to third number. 1 time right to open.

**Combination Lock Drill Point:**  
72-73 @ 7/8"

**Combination Lock Relock Trigger Type:**  
Lever type

**Combination Lock Relock Trigger Drill Point:**  
1/2" Down from dial center by 1" right.

**External Relock Device Type:**  
Spring loaded pin

**External Relock Device Drill Point:**  
2-5/8" Down from dial center by 1-7/8" right.

**Time Lock Manufacturer:**  
LeFebure

**Time Lock Model Number:**  
N/A

**Time Lock Type:**  
2 Movement mechanical time lock in a 3 movement case.

**Time Lock Snubber Bar Drill Point:**  
4-1/4" Up from dial center by 5-3/4" right.

**Special Notes:**  
Instead of drilling for the time lock snubber bar, try top drilling. 4-1/2" in from face of door by 14-1/2" right from opening edge. Drop in a stiff wire and push release to side. You may need a second hole for your scope.

**Dial was replaced on this safe at one time, should be an S&G dial, not LaGard.**





2002



# HONDA VTX 1800

by  
**John  
Blankenship**



part 1



1

The VTX1800 is a new model for 2002 and is powered by a huge 1800cc V-twin engine. Originating a key for this bike is almost too easy.

## IGNITION LOCK

2

The ignition lock is located on the left side of the motorcycle and to the rear of the engine. It only has positions for OFF and ON.



3

Use a large Phillips screwdriver to remove the one screw that holds the ignition lock cover on. You can then grab the cover and pull it off the lock.



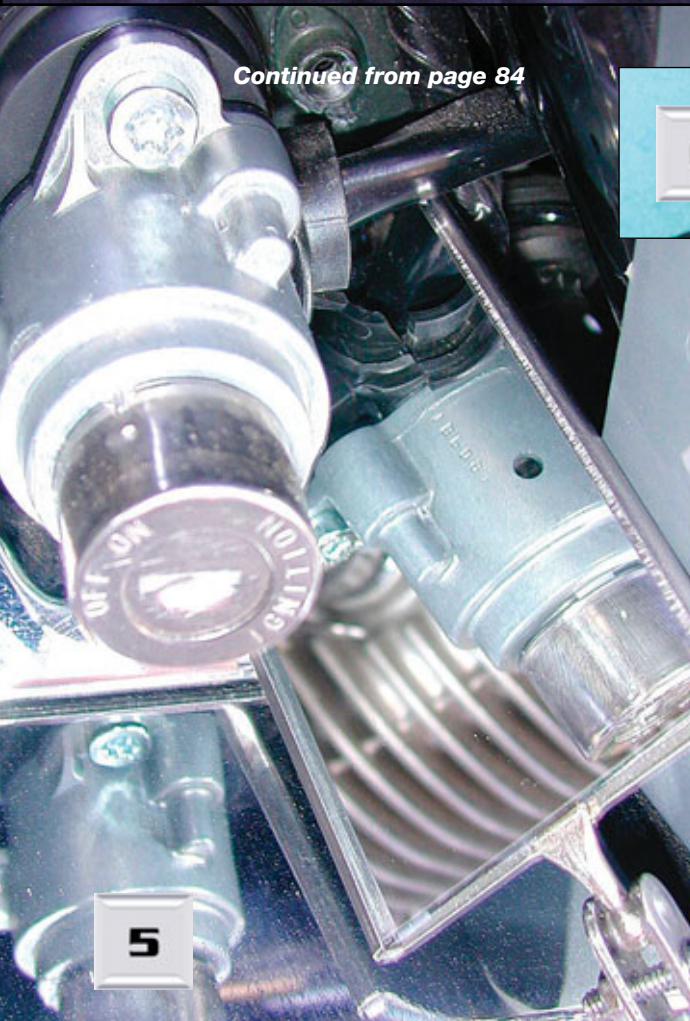
4

The ignition lock cover is shown removed from the motorcycle.

**Continued on page 86**



Continued from page 84

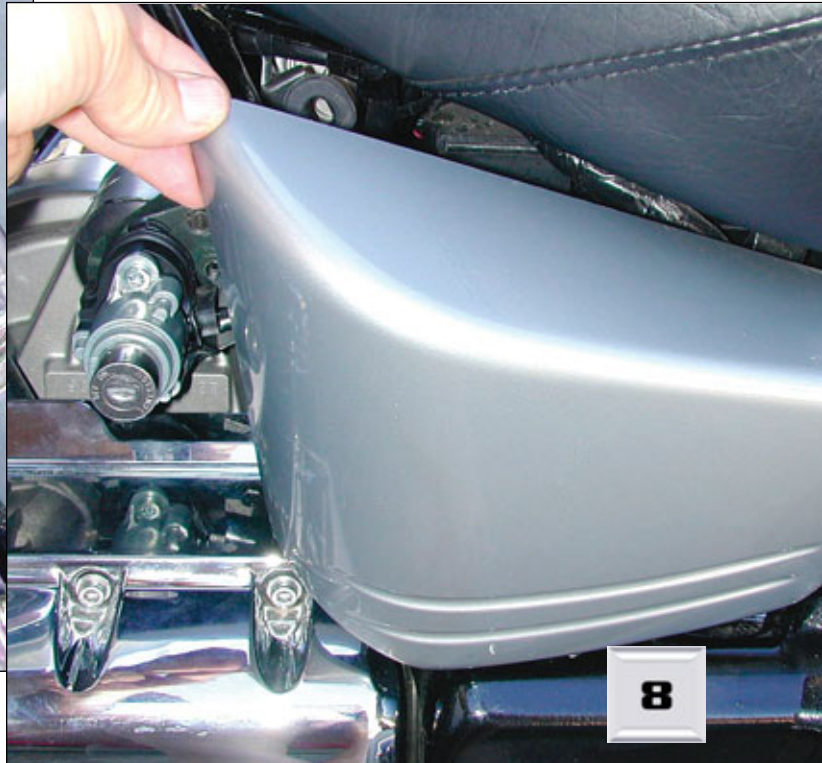


Place a mirror under the bottom/right side of the ignition lock to read the code. You may even be able to read it without a mirror. It is stamped into the lock in very small characters.



This photograph is a close-up of the code as viewed in the mirror. It is in mirror language, but it can be

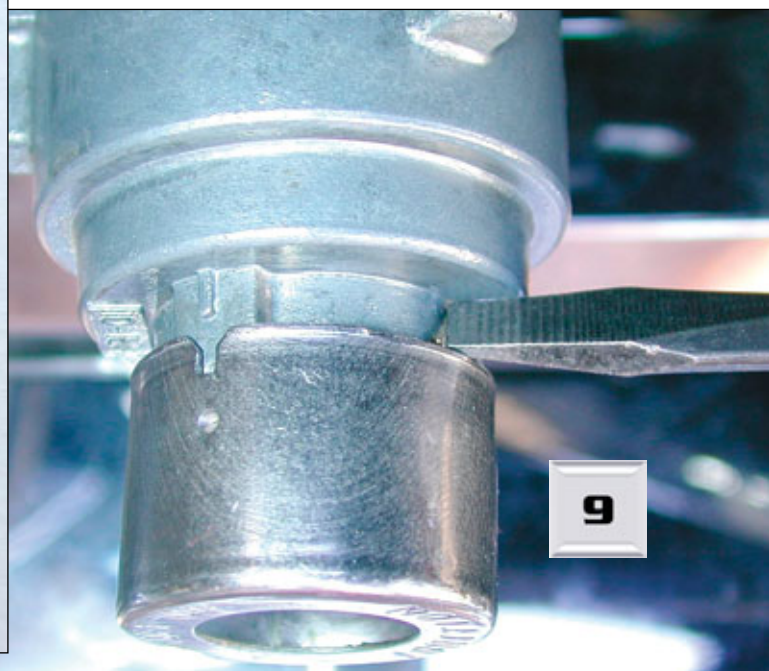
read. The actual code on Honda motorcycles is the last 3 characters. In this case the code is D91.



If you need to remove the plug, it helps to gain extra room by removing the plastic cover just to the right of the ignition lock. It is held on by three tabs that pop right out when you pull on it.

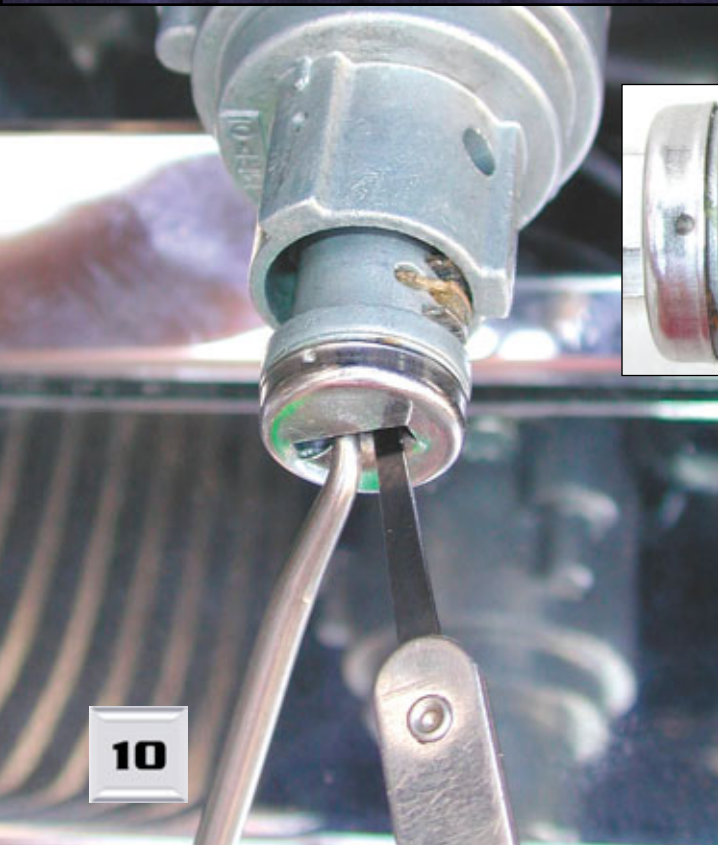


The code cut X138 on the right with cuts of 21133 works all four locks on the motorcycle. The original key with the code stamped on it is on the left.



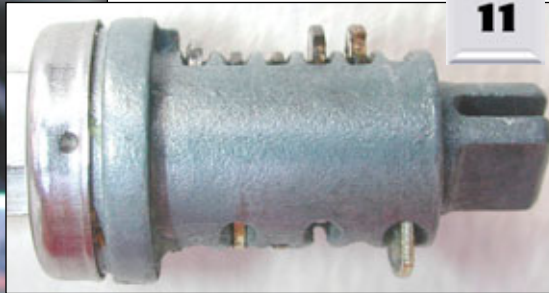
Use a screwdriver to pry the facecap off the cylinder. Work it off evenly by prying all around it.





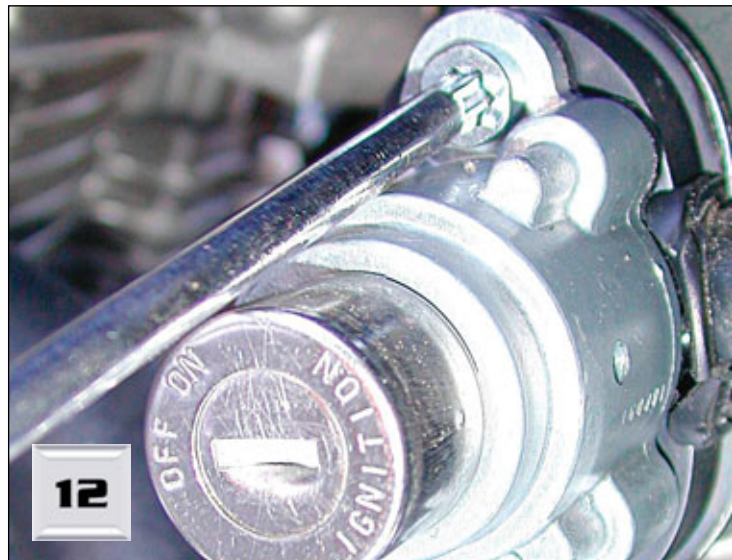
10

Use a hook pick in the keyway to push the wafer retainer to the left while using a hook tool in the keyway to pull the plug out. The retainer is 27/32" (21.43mm) from the face of the plug. That is a hair under 7/8" and it helps to put a mark on your pick and align the mark with the face of the plug.



11

An X138 blank inserted into the plug shows that the cuts are 21133. This lock uses the ASP A-19-101 keying kit, which is also used on Honda automobile door and trunk locks throughout the 80's.



12

You can also remove the plug by disassembly. Use a T-30 Torx driver to remove the two screws that hold the lock on.

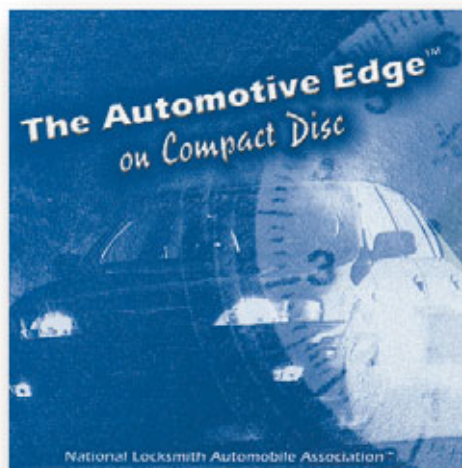
## AutoSmart™



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## AutoEdge



This CD contains over 1,200 pages of automotive locksmith service.

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#AE - CD





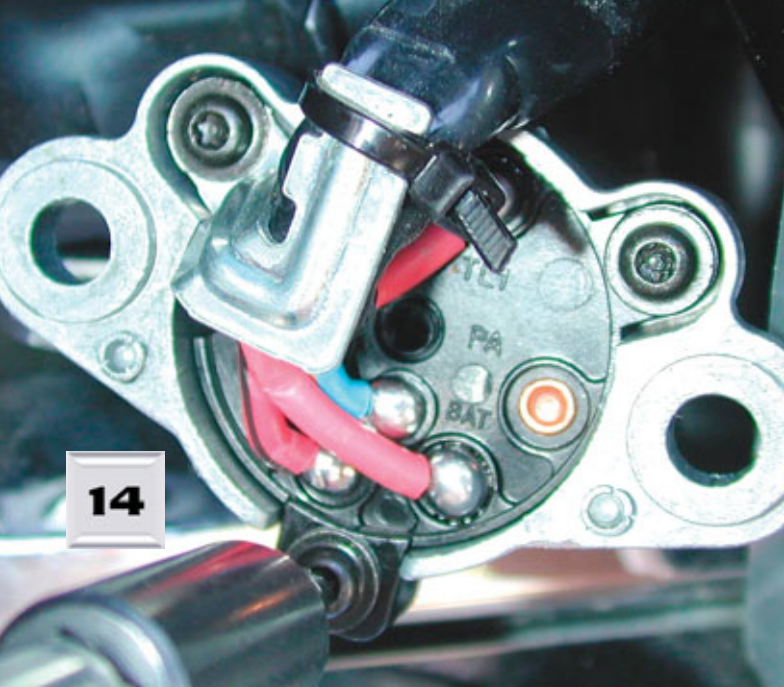
13

Use a small screwdriver to pry the plastic backing plate off over the two flared posts that secure it. When replacing it, use a pair of pliers to squeeze it back on over the flared posts.



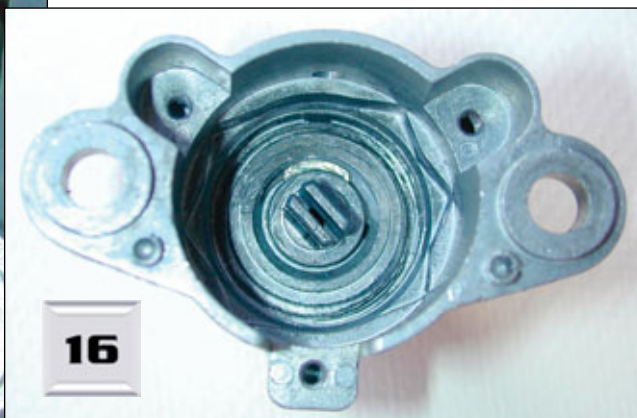
15

The switch pulls out as a unit. Do not allow any of the exposed electrical connections to contact any metal on the motorcycle.



14

Use a T-10 security Torx driver to remove the three screws that secure the switch to the back of the lock.



16

Pry the facecap off if you have not already done so. The wafer retainer is visible on the upper side of the plug. Depress it and push the plug out the front of the cylinder. Be careful and do not allow any of the wafers to fall out of the plug.

Next month we conclude with the gas cap lock and helmet lock.

TNL

## AutoSmart Advisor

Contains virtually every car and part known to man up through 2000.



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#ASA - 2000





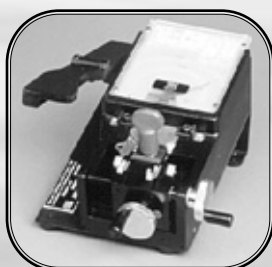
# TECHNITTIPS

## YEAR-END PRIZES



### **Grand Prize**

Silca Bravo Duplicator



### **1st Prize**

HPC's 1200PCH  
Punch Machine



### **2nd Prize**

Mas Hamilton's  
PowerLever 2000



### **3rd Prize**

Curtis 2200 Duplicator



### **4th Prize**

SDC Magnetic Lock,  
Keypad and Exit Switch



### **5th Prize**

Securitron 12-Volt Unlatch Plug in  
Trans & Touchpad Retail Value \$650



### **6th Prize**

LaGard "SmartGard"



### **7th Prize**

Detex Advantex



### **8th Prize**

Arrow 400 Series Alarmed  
Exit Device & S-75 Mounting  
Plate Kit for Narrow Stile  
Aluminum Doors



### **9th Prize**

\$500 in BWD Products



### **10th Prize**

\$500 in ASP Auto Locks



### **11th Prize**

\$500 in Strattec Auto Products



### **12th Prize**

Tech-Train "Jiffy Jack"



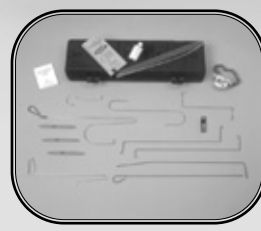
### **13th Prize**

Sargent & Greenleaf 6120  
Electronic Safe Lock



### **14th Prize**

High Tech Tools  
2000 Pro Set



### **15th Prize**

Slide Lock's Master "Z" Tool Set





**16th Prize**

ESP Products Sampler



**17th Prize**

Major Manufacturing's  
HIT-111 Drill Guide



**18th Prize**

Abus Padlock's Marine  
Padlock Display (\$120 Retail)



**19th Prize**

MBA USA, Inc.  
Falle Pick Set



**20th Prize**

Baxter JV-1 & JV-5  
Code Books



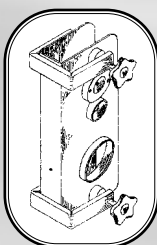
**21st Prize**

Sieveking Products  
Squeeze Play



**22nd Prize**

Rodann's RV500 Wireless  
Door Annunciator System



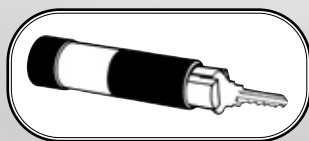
**23rd Prize**

A-1 Security Manufacturing  
Installation Jig



**24th Prize**

Keedex Sampler



**25th Prize**

Framon  
Impressioning  
Handle



**26th Prize**

Gator Tool Multi-Purpose  
Facecap Tool

## These Prizes Awarded Each Month!

• Wedgeco™  
Key Extractor  
Kit

• Strattec  
Racing Jacket

• HPC Air  
Wedge™

• Sargent And  
Greenleaf  
4400 Series Safe  
Deposit Box  
Lock

• A-1 Security  
Products

• ILCO Key  
Blanks (100  
Blanks)

• Keedex "SPIN  
OUT"  
Screwdriver

• Tech Train  
Training Video

• Sieveking  
Products  
Gm E-Z Wheel  
Puller

• Major  
Manufacturing  
Products

• Slide Lock's  
"Z" Tool  
Opening Set

• The Sieveking  
Auto Key Guide

• Jet Key Blanks  
(100 Blanks)

• High Tech  
Tools

• LaGard Combo  
Guard

### Send in your tips, and win!

#### How To Enter

Send a tip on how to do any aspect of locksmithing. Certainly, you have a favorite way of doing something that you would like to share with other locksmiths. Write your tip down and send it to:

Jake Jakubowski, Technitips Editor,  
The National Locksmith  
1533 Burgundy Parkway  
Streamwood, IL 60107-1861

Or send your tips via  
E-mail to: Natlock@aol.com

#### Rules & Regulations

Each tip submitted must include your full name, street address (no P.O. Box numbers), city, state, zip code, phone number, fax number and e-mail address. **When sending tips via e-mail make sure to include complete address and phone.**

#### Every Tip Published Wins

If your tip is published you will win one of the monthly prizes listed. At the end of the year, we choose winners from all the monthly tips published, that will be awarded one of the fabulous year end prizes. All you have to do to win is enter.

Prizes are arranged according to suggested retail price value.

Tips Start  
on Next Page





**JET KEYBLANKS  
 WINNER:  
 GM Progression  
 Chart**

This progression chart is for the GM ignition spaces 1-5 when you have spaces 6-10 from the door. I use this chart when I need to find out the first five cuts for the GM sidebar ignition.

What I do is, I find the cuts for spaces 6-10 in the door and put those cuts on both sides of an uncut blank. Then I place the 1/2 cuts from the chart listed below in spaces 1-5.

The good thing about these sidebar ignitions is, the tumblers are only on one side. Which means I only have to work with one side of the key at a time. I usually have a working key within three blanks.

Place these 1/2 cuts in spaces 1-5

A number 1 is cut to a 1-1/2 depth and a number 3 is cut to a 3-1/2 depth.

**Key #1, Side One:** 11111, 11113, 11133, 11333, 13333, 33333

**Key #1, Side Two:** 11131, 11331, 13331, 33331

**Key #2, Side One:** 11311, 13311, 33311, 33313

**Key #2, Side Two:** 13111, 33111, 33113, 33133

**Key #3, Side One:** 31111, 31113, 31133, 31333

**Key #3, Side Two:** 13113, 13133

**Key #4, Side One:** 13131, 33131

**Key #4, Side Two:** 11313, 13313

**Key #5, Side One:** 31131, 31331

**Key #5, Side Two:** 31311, 31313

When I get a key that turns, I can get the exact cuts for spaces 1-5 by checking for marks or by trying the shallowest cut, and then the deepest cuts of each space. While I'm doing this I leave the other full and half cuts the same. This works for me, and will work for you.

*Jonathan Muhammad  
 Georgia*



**WEDGEKO KEY  
 EXTRACTOR WINNER:  
 Jaguar Trunk Opening  
 Tip**

I just worked on a 1986 Jaguar XJ6, where the trunk wouldn't open. I could hear something loose as I worked the key, but it wouldn't release the lever.

To open the trunk, I removed the license plate and underneath found two rubber bumper strips to keep the plate from rattling. I removed the bumper strip on the left and found a 1/4" by 1-1/2" hole. I inserted a long screwdriver in the hold and tripped the latch to open the trunk.

*John Wallace  
 California*

## A Few Words From Jake...



**by Jake  
 Jakubowski**

I was on a forum the other night and the discussion was on getting business, getting started, and how to get the word around. We've all been in that type of discussion at one time or the other, either on the Internet or in person.

One person in the discussion said the best thing that could happen to a "newbie" was to get word-of-mouth advertising. The more word-of-mouth, the better. I've always agreed with that premise up to a point.

Then a fellow named Arnie Bell jumped into the discussion and said the most important thing that both the new and seasoned locksmith can do, is figure out a way to develop a relationship with their customers that would make them want to call back.

It's not a much different premise than Dale Carnegie put forth in his book "How To Win Friends and Influence People." Winning a customer base is no more, or less, difficult than winning friends. Even though a customer may have initially called you randomly, if they call you back, it's because you made a good impression. You influenced them favorably enough the first time for them to call you back the second time.

Arnie pointed out that there are extraordinarily competent craftsmen in this field that can't keep a customer. He also pointed out that less qualified locksmiths who needed a lesson or two in personal hygiene, had all the repeat business they could handle.

Why the disparity?

Because the better qualified, more competent locksmith lacked the most essential quality of all for success: The ability to get along with people. He was unable to get his customers to respond to him in a positive manner. It had nothing to do with his competency, ability or skill with tools. It had to do with his inability to make folks like him.

Each of us should set back and take a look at what we're doing. Are we selling skill at rekeying, or are we selling ourselves?

I think Arnie had a valid point: We should try to influence our customers in a positive manner to make them not only want to use us again in the future, but to a degree that they would not hesitate to recommend us to their friends.

See y'all next month.



**STRATTEC WINNER:  
 Mercedes Key Tip**

Late one cold, rainy afternoon, I was on the way home from another day of picking and grinning. I stopped at a local store to get some gas and something cold to drink. I saw a line of cars behind a Mercedes parked at the pumps. I didn't want to wait in line so I pulled up and parked outside the door.

On the way into the store I noticed an elderly couple huddled at the phone booth trying to keep dry. The store clerk said they had called a tow truck and had been waiting for over an hour. The clerk was upset because the Mercedes had his pumps blocked. On the way out I stopped and asked them if I could help. The man said his key (an S48HFP) wouldn't work. He said he had taken the car to a local Mercedes repairman a few weeks ago because the key had been giving him trouble. The lady said the drivers door lock had not worked in a year or so.

I told them that I might be able to help them. They both laughed and the

elderly man said no one could help but the Mercedes repairman. The repairman had told them he would have to take most of the dashboard out to install a new lock. They were told it would cost about a thousand dollars. The man gave me the key and, with a smile told me I was going to get wet for nothing.

I went to the passenger door and the key worked. I then went to my van and installed a slightly larger tracer point in my Matrix SLX machine. This would make the cuts on the key I was about to cut ten thousandths shallower than the customer's key. After cutting the new key, I found that it worked well in the passenger door and in the driver's door too!

As I was being paid and hugged, the tow truck arrived. The driver was a friend of mine and agreed not to charge the elderly couple for a service call if I would open a car for him the next time his slim Jim didn't work. A few days later the tow truck driver called. He said he had a call about another Mercedes with the same problem. It was owned by a local beauty shop owner who rushed to the hospital to see her grandmother.

**Continued on page 94**



**Continued from page 92**

The car was parked in front of the emergency room. I used the same method as with the other Mercedes. It worked again.

I am assuming that the wafers had worn and by cutting the key shallower compensated for the wear and allowed the key to work properly again.

*Herbert McCrider  
South Carolina*



**HPC WINNER:**

**Electronic Lock Tip**

International Electronics (IED) has an electric lock that seems to be well enough made to withstand the abuse of daily, high traffic use. It is esthetically well designed and as a locksmith, I think it will be a nice addition to my product line. However, I find the installation and programming instructions leave a little bit to be desired. Consequently, I'd like to pass this on to other locksmiths that might be encountering the same problem.

The enclosed instruction sheet does have a very nice template for marking the standard 2-1/8" crossbore and the three extra holes required. The instructions are also very specific about adjusting the lock properly for the door thickness.

The lock I installed was preset as a right-handed unit. No where in the instructions did I find information about changing the hand of the lock. I discovered through trial and error, that the hand could be changed by rotating the lock body and the outside spindle, if I first completely depressed the latch retractor mechanism. This, of course, has to be done before the lock is placed on the door.

A difficulty with the programming is changing the master code. On page six of the programming manual, the installer is strongly urged to change the master code immediately. However, no instructions are given for changing the master code. On page 16 in a table of programming commands, the installer is told that the master code resides in Location "1".

To access Location 1, the installer must follow the instructions on page 12 for "Adding New or Changing Existing Codes." To do this: place the lock in program mode by pressing "99 # 1234 \*" on the keypad. (1234 is the default code.)

The slow blinking yellow LED means you have successfully entered the program mode.

Next press "1 #" for standard access. Then press "1 #" to enter Location 1 where the master code is held. Enter a new master code of your choosing. The yellow LED will now blink rapidly. While the LED is rapidly blinking, enter the new master code for a second time to

confirm the new code. The LED will begin to blink slowly, indicating that the system has accepted the new master code. Press the star (\*) key to exit the programming mode.

Now the system is armed with the new master code and you can program the user codes according to the instructions.

*Raiford Ball  
Tennessee*



**HIGH TECH**

**TOOLS WINNER:**

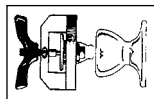
**Mall Door  
Location Trick**

When doing work at malls, I often have to go through the main entrance first, to notify the store manager that I am present and ready to do the job.

If I'm working on a panic device or other hardware located on a back exit door, I obviously need to pull my service vehicle to the backside of the mall to the door in question. At many malls the doors are not always marked or identified; which makes locating the exact door in question difficult.

To save time and keep from missing the door I'm going to work on, I mark it by using my metallic address-phone/number labels. When entering through main entrance for the first time and checking out the rear door, I apply my sticker to the outside of that door. Then when I drive around back, I can easily spot the door I need to work on.

*Merlin Bechtel  
Mississippi*



**A-1 SECURITY**

**PRODUCTS WINNER:**

**Broken GM Glove  
Box Fix**

I was asked to make a key to the trunk of an older GM vehicle. I was in a hurry that day and as I was taking the glove box lock apart to get the last 4 cuts of the key, I somehow broke the ears that retained the cylinder plug in the housing.

That of course meant the cylinder plug would not stay in the lock housing. Looking for a way to solve the problem (I did not have another lock on the truck), I noticed that the back of the plug has a groove cut around it to accept the "ears" of the retainers.

I measured back on the housing where the back of the plug stops, and drilled a hole in the housing in line with the ridge on the plug. I then screwed a sheet metal screw in the housing and in to the ridge of the plug. It's the same principal as a setscrew holding a mortise cylinder.

I put the glove box back together, collected my money and went on to the next job.

*Bill Wessel  
California*



**ILCO KEY BLANKS**

**WINNER:**

**Chapstick for  
Padlock First-Aid**

I was working on a Master 220 padlock when everything came out: springs, ball bearings, even the little roll bar. Not having four hands and not wanting to pull the door panel on my car to get some of that gooey black stuff to hold the roll pin and ball bearings in place, I started to think about what I could use instead.

I searched my medicine cabinet and viola! Chapstick. I just rolled the ball bearings across the top of the Chapstick and they stayed right where I put them. Then I rolled the roll pin across the Chapstick and placed a dot of the Chapstick on the end of the Allen wrench I was using and picked up the roll pin and placed it where it belonged.

Even my little fingers were too big to put it where it belonged. Now I could put everything else back. It sure saved me a lot of time and aggravation. When you don't have goo from a car door Weatherguard or Lithium grease, go for your Chapstick.

Another nice thing about Chapstick is, it fits into your pocket.

*Joan Yarrington  
Texas*



**KEEDEKX WINNER:**

**Post-It Note Pinning Aid  
for A-2 I-core**

I was pinning up 75 BEST cores (KA) that required two #4 top pins in each core. As many of you know, the #4 wafer tends to jam slightly sideways, and you have to struggle with it to get it to slip in correctly.

To solve this, I keep a pad of Post-It notes nearby. Place the #4 top pin on a flat surface, then touch the sticky part of the Post-It to the top surface of the pin. This allows you to use the Post-it as a holder to place the pin right into the chamber without it tilting.

This will also work for the #3 A4 wafer and other thin master pins in other kits. Try it, it works every time!

*Rick Duskiewicz  
New York*



**TECH TRAIN**

**TRAINING VIDEO**

**Mag Lite Opening  
Aid**

I rigged MAG Lite to aid us in night openings of autos. (See photograph 1.) All you need is a MAG Lite, some plumber's strap and a clip with a magnet on it. I picked up the clip and magnet at Harbor Freight Tools for under \$3.00.





Photograph 1.



Photograph 2.

Now when I do car openings, I can attach the mount and MAG Lite to the car door and my hands are free to perform the opening. (See photograph 2.)

Rod Springfield  
Texas



SIEVEKING  
PRODUCTS GM E-Z  
WHEEL PULLER  
WINNER:  
**Jig for Drilling Rim  
Cylinder Holes**

When installing panic bars on aluminum or steel doors, you don't have the luxury of using a back plate to secure the rim latch. The screws have to be installed through the door, and accurate drilling of the holes is essential.

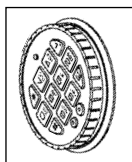
To make a jig to insure the accuracy needed, I used one of the rim latches and machined a 2-1/2" long piece of 1/2" diameter aluminum round bar stock to fit through the plug hole. Then I bored a 3/16" hole through the center of the round stock. It's easy if you have a small lathe, but it's still possible to do it using a drill press.

Now all I have to do is bore the normal outside 1-1/8" hole in the door, put the rim cylinder with the round drill guide in it, and drill through it to the inner side.

The resulting hole will be the pilot hole for the 5/8" hole saw used on the inside. Then I put the rim cylinder and drill guide back in the hole, and the end of the drill guide now becomes the guide for the back plate so that I can drill the two screw holes.

From there, it's an easy matter to use the factory template to finish mounting the panic bar.

Steve Shields, CPL  
California



LA GARD WINNER:  
**The Short and The  
Long of Honda Keys**

I had a customer with a key stuck in his 1994 Honda Accord EX. The key would not turn back far enough to come out. It was turning smooth and easy, and would crank the car. Just wouldn't turn back far enough to come out.

When I arrived he told me that he had gotten the key cut some time back, and when he tried it out, it got stuck. Upon looking at the key, whoever cut it had cut it on a X195 blank, instead of a X214. The X195 is for a 93 Honda Accord and the shoulder is not as long as the X214.

When the X195 is used instead of the X214, the head of the key will not allow the ignition to be pushed in to turn because it is too short. To fix the problem I simply cut the head of the key off. Put my needle nose vise grips on the blade of the key sticking out of the ignition, pushed in and turned. Key came right out.

I duplicated the shortened key on the correct key blank (X214) and it worked fine.

Marc Grizzard  
South Carolina



SLIDELOCK Z TOOL  
STARTER SET WINNER:  
**GM Wafer Removal  
Tool**

I found a very easy way to pull the wafers out of a GM sidebar lock. I use an HPC diamond shaped pick (Model # HPLX-10). This is the .028" thick model, which is much stronger than some of the thinner ones.

I file a small amount off the tip of the pick to make it just the right size to fit tightly into the top of a GM wafer. To pull the wafer out of a lock, insert the modified pick at an angle and then turn it to the vertical position. This will wedge the pick into the slot in the top of the wafer. Then, all you have to do is pull, and the wafer slips out. (See illustration A.)

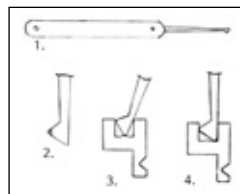


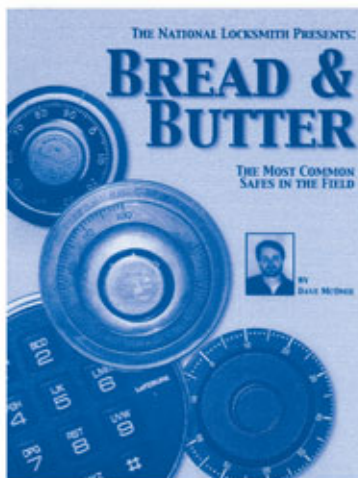
Illustration A.

I've been using this tool for about 5 years. It has always worked perfectly and has saved me a lot of time.

James L. Starks  
Colorado

TNL

# Bread & Butter



Now here is one  
amazing value!

CLICK HERE TO LEARN MORE

#BB - 01



# Mutual TL-15

By Mike Griffin

I acquired four Mutual TL-15's, two of which were open and two were locked. To open the ones that were locked, I asked my boys if they would like a crack at it. They said the B-rates they opened last were too easy, and wanted a bigger challenge. I thought these Mutual's would be the perfect challenge.

This time my seven-year-old Brian, wanted in on the action. I had to find something he could do, and the internal compartments were perfect for him to start with.



**Photograph 1.**

The first thing we did was take the back panel off of one of the Mutuals that was open. I showed the

boys how to measure for the combination lock bolt. The lock box was mounted vertical up, which makes this the perfect safe for top drilling. (The key locks were not being used.) I let the boys measure and mark for top drilling. Then I checked to make sure they were accurate.

## Top Drilling:

First we used our DeWalt battery drill with a 1/4" bit, mainly because of the clutch which keeps from binding and twisting out of the operators hands. After penetrating the thin outer body, we switched to our Bosch Bulldog in hammer mode with a 1/4" mortar bit.

*Photograph 1*, shows Kevin using the Bosch Bulldog while William waits his turn. This drill will eat through virtual any reinforced concrete with very light pressure. In my opinion this is the best hammer drill on the market.

We then switched back to our DeWalt to penetrate the inner steel body into the door cavity. At this point we used an automotive light bulb attached to a 12-volt battery charger as our light source. Simply drop the small auto bulb through the hole and into the door cavity for more than ample light.

As you know, a well-planned opening may not always go the way you planned it. In this case our hole was perfectly aligned with the combination lock bolt, but the back panel was pushed inward into the

door cavity, making it extremely difficult to see the lock bolt. We had a good view of part of the lock, so we put a slight bend in the end of our 1/4" rod used as a lock bolt punch. By putting pressure on the handle and then inserting the rod and tapping we could feel whether our rod was on the lock bolt or not. When we felt that we had our punch on the lock bolt we tapped with a hammer several times.



**Photograph 2.**

The first attempt was not successful. Instead of punching the bolt back, the punch rod pierced the lock case. *Photograph 2*, shows the hole in the case beside the lock bolt. The second try was successful.





**Photograph 3.**

*Photograph 3*, is William's victory shot with our drill hole marked by pieces of rolled up white paper, which shows up better than the drill bit. Also notice the caved in door panel, which caused us extra time.

#### **Internal Compartment:**

Now for the internal compartment which was still locked with an S&G electronic lock with a spring bolt. *Photograph 4*, shows Brian, my seven-year-old,



**Photograph 4.**



**Photograph 5.**

diligently drilling the thin inner compartment. Brian simply drilled a 1/4" hole. With a slight bend on a 1/4" rod we simply fished around until we pushed the spring bolt back. Total time to fish the bolt back as about 8 minutes. In Brian's victory photograph he was just as happy as if he had opened the outer safe. (*See photograph 5.*)

*Photograph 6*, show one of the TL-15's completely refurbished. This unit was made into a gun safe. Notice in *photograph 7*, the pistol pocket on the back of the door. The cover hooks onto the back panel and



**Photograph 6.**



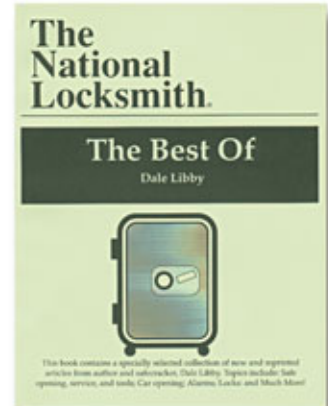
**Photograph 7.**

the pockets have Velcro on them so that they can be moved around.

Well, now that the boys have knocked out a Mutual, I wonder what will be their next challenge?

**TLN**

## **The Best of Dale Libby**



**CLICK HERE TO LEARN MORE**

#DALE





# Open Forum



## Van Signage

**Q:** What sort of truck signs do you use? The various choices available include paint, vinyl, and magnetic signs. Which ones do you use, and why? What did you spend on your truck signage? Do you believe this to be a valuable form of advertising? What are the advantages and disadvantages of the different choices? If you don't use truck signs, why not?

-----  
**A: Robert Sierra**  
(sierra123@lightspeed.net)

The van I drive simply says "Sierra Lock & Safe" with the contractors license number below it. No phone number or anything else. No yellow pages advertisement, just a line listing nothing fancy. I guess we have a large enough commercial base that its not needed. We run two full time locksmiths and vans, and two part timers, so we must be doing something right.

Sometimes I wish the vans were decorated nicer, but then I realize that would cut into the bottom line where my paycheck comes from.

-----  
**A: Bryan (hillbros@pacbell.net)**

We have three vans. Two are painted the same and lettered with our name and phone numbers. One van has no lettering and has not been painted. The only reason it hasn't been painted and lettered is we can't take it out of service for a week. We plan to buy another van and then "decorate" accordingly. The nice thing is that our

customers can spot us easily in crowded parking lots and such. We have received business from people that spotted our trucks and wrote our phone number down. Sometimes seeing our trucks reminds them of that lock that is "acting up" and this prompts the call. Our lettering is hand painted but we will use vinyl next time because the sun and frequent washing fades the painted lettering.

-----  
**A: Dale Sweeney (keyman@ipa.net)**

I use vinyl and had it done by a company in New Jersey. It cost \$275 in 1996 and it is the best money that I have spent on advertising. The graphics were designed on a computer, allowing easy modifications to the initial design. The vinyl is easy to keep up with a little Armor-all. I have a white Astro van with red and blue lettering. The colors really stand out.

-----  
**A: Jim Stevens (deejay@prysm.net)**

I had vinyl signage put on my truck 23 months ago and it looks as good today as it did the day they put it on. I think it was about \$225 to have the logo, phone number and special signs on both sides and the logo and special sign on tailgate. The vinyl can be removed a lot easier than paint when you want to sell the vehicle and the vinyl doesn't affect the paint like magnetic signs do.

**A: Tom Lynch (LynServe)**

Use of the vinyl lettering has proven to be the best value for the money. It can easily be applied and altered and can also be utilized for use with magnetic sheeting. This is very useful for a sub contractor. I had lettered my van with the bells and whistles and had host companies supply me with a predescribed sized name and number, all I had to do was slap them on over my name and number and off I went, representing them. At times I had 5 different ones on board, changing them like a comedy routine. The best choice in the vinyl lettering is the "Scotchlite" quality. It is the reflective style that is used by emergency vehicles. The cost is more, however it is an eye catcher! Nothing draws attention better then a fully advertised van moving through a busy intersection, everybody looks! It is also easy to apply, so you can have your sign maker simply cut it out and you apply, saving you money. You can even have photos of products, people, etc., put on the vinyl and create a moving billboard. Cost range from \$400.00 and up.

-----  
**A: Gene, Starfleet Lock & Safe**  
(warped@fgi.net)

I have two vehicles. The first one I had all vinyl lettering applied and modified later as I changed things, but my logo was painted on, as the computer program the sign company had was not up to par.

My second vehicle (newest one) has everything in vinyl. The lettering is all in the reflective type vinyl. The logo uses a navy blue background, with everything else in the logo in reflective vinyl. The windows on the side doors are covered in a vinyl that has small holes in it. (Makes it easy to see out, but hard to see in.) One window further has my logo over the vinyl window screening. This truck looks good even in the day.

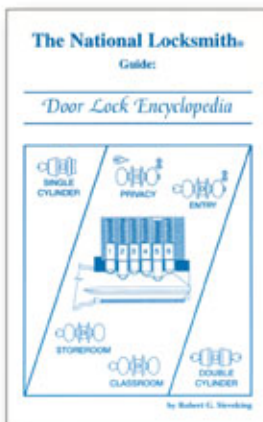
None of my competitors use the reflective. Some don't even bother to put anything on their trucks, no lettering, names, or anything.

My trucks are the best advertising I have. I get comments all the time from people who say they see my trucks all over town. Guess what, currently I am the only employee. That means they keep spotting the same truck all the time. Isn't it great?

A: Mike Shearer, CRL  
(mshea84372@aol.com)

I have used vinyl lettering on my last two trucks. It lasts forever.

## Door Lock Encyclopedia



CLICK HERE TO LEARN MORE

#DLE

The first truck was in service for 12 years and the lettering never faded nor peeled. I was told to wait about 10 days before waxing the lettering. I have two-toned colored vinyl lettering on the present white van. Looks great. Vinyl is much easier to remove when selling the van also.

A: James Guthery  
(gutherylock@k93mail.com)

I use vinyl letters on my van. I live in a rural area and want to be seen for advertising. I have a red

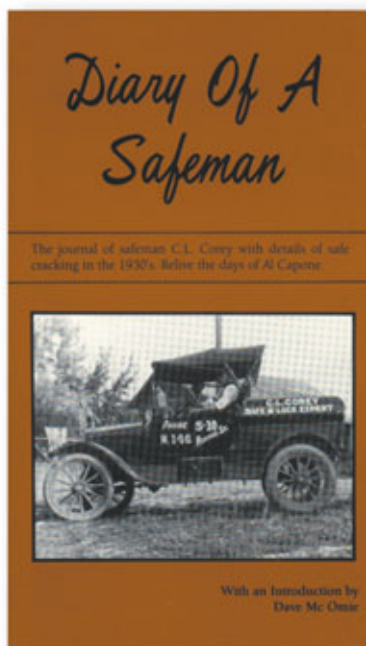
van with bright yellow letters. My Logo is incorporated in my name and I have a slogan as well. I have listed a phone and pager number. Very simple. I have had compliments and it has paid off for me. The cost was a little over \$200.00, but well worth it. To be professional you have to also look professional.

A: Bryian (hillbros@pacbell.net)

What do they say... Perception is reality!

TNL

# Diary Of A Safeman



This book is a real gem...the private safe diary of old time safecracker C.L. Corey.

CLICK HERE TO LEARN MORE

#DIARY



# BUSINESS BRIEFS

## **effeff Electric Strikes & Door Controls**

effeff Fritz Fuss GmbH & Co. KGaA., announced that the 15-year sales agreement with Rutherford Controls expired on May 31, 2002. On June 1, 2002, HES, Inc. will begin offering *effeff* products on a much broader scale than what was previously available through Rutherford Controls. This new sales arrangement will benefit end-users, installers, and distributor customers in a number of ways: Firstly, innovative new *effeff* products, such as the all-in-one high performance PENTA, not previously offered in the US and Canada, will now be available to end-users and installers. Secondly, *effeff* customers can now take advantage of the comprehensive sales and support services offered by HES, Inc. and ASSA ABLOY Canada.

HES, Inc. is located at 2040 W. Quail Ave., Phoenix, Arizona 85032. Phone: (623) 582-4626 or (800) 626-7590; Fax: (623) 582-4626.

ASSA ABLOY Canada is located at 3475 14th Ave. Markham, Ontario, L3R 0H4. Phone: (905) 940-2040 or (888) 830-9898; Fax: (905) 940-3242.

## **FireKing Announces New Hire**

FireKing International has added William Whitehead Jr. as a National Accounts Manager.

Whitehead will be responsible for the Northeast Territory that covers the East Coast, running from Virginia to

Maine. His primary responsibilities will involve promoting the intelligent line of FireKing products, including Image Vault Digital Recorders and NKL Autobank Safes.

## **Hardware Technologies, LTD. Has New Name**

Hardware Technologies Ltd. has changed their name to HOPPE North America, Inc. This change reflects the efforts of many people to establish the brand name HOPPE, in Europe, and HTL's own efforts to present the HOPPE name in North America.

HTL's parent company has been HOPPE for over 10 years and is the preeminent handle and trim manufacturer in Europe. HOPPE is a leading North American distributor of European precision hardware for the high-end residential door and window market.

For more information call: (888) 485-4885, or visit the web site at: [www.us.hoppe.com](http://www.us.hoppe.com).

## **Aiphone's Updated Technical CD**

The new Aiphone technical CD contains product and company information similar to what is on their web site. It includes the QuikSpec program, which allows you to spec an Aiphone system right from your computer. This technical CD also allows you to search for product information by application, system, or alphabetically. Every product page contains specifications, system components, and product

literature, which can be downloaded in a PDF format.

For more information call: (425) 455-0510, or visit our web site at: [www.aiphone.com](http://www.aiphone.com).

## **Von Duprin's Computer Managed Exit Trim**

Access Hardware Supply offers the CM993 Computer Managed Exit Trim from Von Duprin. The CM993 is a battery-powered, stand-alone exit trim, designed for use with Von Duprin's 98/99 Series Exit Devices. It can be programmed with Locknetics' LockLink™ and LockLink™ Express software for a new level of access control management.



The CM993 Exit Trim can manage up to 1,000 users and provides an audit trail for the last 1,000 events. Its SmarTime feature gives a wide range of timing functions and is available with either mag stripe or prox card readers for reliable and flexible performance.

For more information call: (800) 348-2263.

## **Teri West Joins DORMA**

Teri West has joined DORMA Group North America as architectural sales consultant covering the southeastern United States. She will work primarily with architects to develop functional and aesthetic solutions for entryways, through the specification and use of door hardware, automatic and revolving doors, glass wall systems, and moveable wall and partition systems.

For more information about DORMA, call: (800) 523-8483, or visit our web site at: [www.dorma-usa.com](http://www.dorma-usa.com).

## **Indiana Sets New Industry Standard**

Indiana Cash Drawer Company has added an enhancement to the POSservice Extended Warranty Program for their SLD cash drawer line. ICD's standard warranty originally provided two years parts and labor, from the date of product installation. With the improved POSservice Extended Warranty Program, customers will obtain a 3-year warranty from date of installation, on parts and labor, plus free return shipping via UPS Ground, during the warranty period. The warranty program covers the following products: Indiana SLD POSimlink cash drawer, Indiana SLD SOP cash drawers, and Indiana SLD SSTI/PSTI cash drawers.

For more information on ICD, visit their website at: [www.icdpos.com](http://www.icdpos.com) or contact Catherine Shergi, Sales and Marketing, at: (800) 227-4379; Fax: (317) 392-0958; or E-mail: [csergi@icdpos.com](mailto:csergi@icdpos.com). **TNL**

# THRU THE KEYHOLE

## *A Peek at Movers & Shakers in the Industry*

### ATTENTION MANUFACTURERS AND DISTRIBUTORS:

Would you like your company and products to be profiled in *Thru The Keyhole*? Please call Editor, Greg Mango, at (630) 837-2044.

### **Indiana Cash Drawer**

#### *80 Years of Cash Drawer Manufacturing*

Indiana Cash Drawer Company was founded by J. Ralph Showers, Sr., on April 4, 1921, in Shelbyville, Indiana. A Burroughs adding machine salesman, Showers envisioned an integrated adding machine/cash drawer unit to simplify retail operations and provide an inexpensive alternative to a cash register. He developed the original unit by inserting a hardwood cash drawer into a base beneath a mechanical adding machine. When the adding machine was operated, the cash drawer opened automatically and the warning bell rang. Showers received a patent and began production in the former Fleming Building at the northeast corner of Jackson and Harrison Streets. The company subsequently moved to the northeast corner of Colescott and Miller Streets, and relocated in the present headquarters at 1315 S. Miller Street in the late 1920s.

From the beginning, the company was committed to innovation and quality. The original hardwood cash drawers were made like fine furniture. Today's hardwood models have similar craftsmanship. J. Ralph was joined in the business by his sons: Richard, Joseph and William. The company is still family owned with J.R., III, a third generation Showers, playing an active role in the operation of the organization. The company's philosophy hasn't changed, but the product line has changed continually.

Indiana Cash Drawer pioneered new models, incorporating modification in tray configuration, security options, and compartment specifications. The gradually expanded product line included under-counter cash drawers, large capacity bank drawers, specially designed equipment for chain stores, and the Indiana Autographic Cash Register. Introduced in 1928, the Indiana Autographic Cash Register gave small merchants a complete written record of business transactions, making it easier for them to compute and analyze profits.

Another major innovation during this timeframe was the introduction of the removable metal money till, which enabled retailers to switch cashiers without having to stop operations to verify the cash. Like several other manufacturing companies, Indiana Cash Drawer adapted their facilities to support the war effort during World War II. The company manufactured heavy steel pintle pins for the Army's 105 and 155-millimeter howitzers, and produced other heavy artillery gun parts under various defense sub-contracts. A certificate of appreciation, dated 1945, from the Pullman-Standard Car Manufacturing Company of Hammond, Indiana, is still proudly displayed in the lobby of the corporate office commemorating this participation.

After the war, it was back to the cash drawer business. As retailing technology became more sophisticated, Indiana Cash Drawer continued to develop, with new cash drawers designed for check/charge transactions and electronic operations. The next major milestone came in the early 1960s, when the headquarters was transformed into a modern vertically-integrated manufacturing/distribution facility and the company embarked upon a series of innovations that helped transform the POS industry: 1960 - ICD pioneers electromechanical cash drawers for computerized POS systems, 1970 - ICD introduces the logic lever controllable cash drawer interface, 1982 - ICD introduces the first intelligent cash drawer, 1984 - ICD introduces the first parallel communication controllable cash drawer, 1992 - ICD introduces the SLD cash drawer and the POShoe® for integrated POS systems.

Point-of-sale (POS) systems, like those seen at check out counters in retail stores, are increasingly complex. Modern systems often incorporate scanners, which "read" the prices, receipt/invoices printers, keyboards, and pole displays, which show transaction information to customers. In 1990, Indiana Cash Drawer took another major step by forming alliances with other leading manufacturers to distribute a full line

of peripherals and accessories for a comprehensive, customized POS system. This single source service, the POSource® program, is a major convenience for POS resellers. The program is enhanced by expanded Technical Support, Customer Service and International Sales Departments. In house engineering resources are also available to solve any complex technical or design issues.

In 1996, to meet growing demands of this segment of the business, an additional manufacturing facility was added in Aguascalientes, Mexico. Here Indiana Cash Drawer joins other leading U.S. companies, such as Texas Instruments, Xerox, and Thermo King. Manufacturing to ISO 9002 international quality standards, this facility joins with the corporate location in Shelbyville, Indiana, to provide the manufacturing capacity and capability needed to compete in today's competitive environment.

March 1999, the company acquired JNT Enterprises of Tampa, Florida. Now operating under the name ICD Wireless Solutions, this facility offers credit card processing equipment, walk-in repair service, and product deployment. The products are designed around a data exchange modem box converting computers and credit card terminals from traditional telephone line communication to a wireless solution. Using Cellular Digital Packet Data (CDPD) technology, ICD Wireless Solutions developed a low cost, high speed solution for transferring data. Typical usage for CDPD data transfer include: credit, check or debit card authorizations, inventory control, order entry, employee time clock and other POS functions.

Today, Indiana Cash Drawer is a leading cash drawer manufacturer and one of only two manufacturers of wooden cash drawer products in the world. The Showers family and employees of Indiana Cash Drawer continue to proudly contribute to the growth and integrity of the POS industry on the solid foundation built by the founder, J. Ralph Showers, Sr. **TNL**

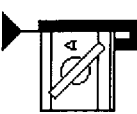


# FREE Code Cards!

from The National Locksmith®

COLLECT 'EM ALL!!

Spaces		Depths		Cutter: CW-1011		IC #: 903	
mm	Inch	mm	Inch	Jaw: A	Series	Original	
1	2150	846	2	855	337	50000-69999	
2	2010	791	1	820	323		
3	1800	709	3	690	272		
4	1660	654	4	625	246		
5	1450	571					
6	1310	516					
7	1100	433					
8	960	378					
9	750	295					
10	610	240					



Align: Black horse shoe lip stop

**The National Locksmith®**

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**Toyota 50001-69999**

**Toyota 50001-69999**

**InstaCode**

Copyright 1994 - 2001  
WH Software

Key Blank Mfr. Blank #  
Silca TOY43AT4

Spaces		Depths		Punch		IC #: P903	
mm	Inch	mm	Inch	Jaw: A	Series	Original	
1	2150	846	2	855	337	50000-69999	
2	2010	791	1	820	323		
3	1800	709	3	690	272		
4	1660	654	4	625	246		
5	1450	571					
6	1310	516					
7	1100	433					
8	960	378					
9	750	295					
10	610	240					

Insert key such that face of jaw meets key profile

Align: Tip stop (Left Insertion)

**The National Locksmith®**

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**Toyota 50001-69999**

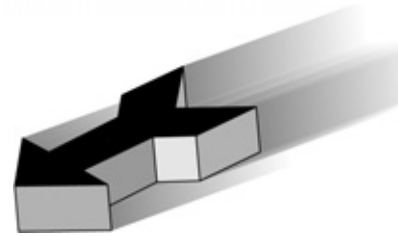
**Toyota 50001-69999**

**InstaCode**

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WH Software

Key Blank Mfr. Blank #  
Silca TOY43AT4

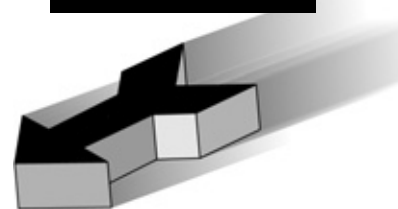
Cut Along Outside of Card and Laminate To Use



## BONUS Code Card

For the 1200CMB™

Flip 'em over for  
Silca,  
Curtis,  
Framon,  
A-1  
and  
ITL specs!



## Code Card

For the 1200PCH™

Courtesy of  
INSTA-CODE 2002™ from  
The National Locksmith

Toyota 50001-69999

HPC 1200CMB™

HPC: N/A      Cutter: CW-1011  
Vice: A

Silca Unocode

UnoCode Card No.: 1420  
Vice/Adapter V100 Standard

HPC Codemax™

DSD: N/A  
Jaw: A  
Cutter: 1011

Curtis

Cam Set: N/A  
Carriage: N/A  
Clipper: N/A

Framon

Cuts Start At: 404      Cutter: N/A  
Spacing: .0551 / .0826 Alternating  
Block #: N/A      Depth Increment: .0255  
Key Clamping: Key aligned using left side of vice

A-1 Pak-A-Punch™

Quick Change Kit: N/A  
Punch And Die: N/A

ITL

ITL Manufacturer ID: N/A

Toyota 50001-69999

HPC 1200PCH™

HPC: N/A      Punch: N/A  
Jaw: N/A

Silca Unocode

UnoCode Card No.: 1420  
Vice/Adapter V100 Standard

HPC Codemax™

DSD: N/A  
Jaw: A  
Cutter: 1011

Curtis

Cam Set: N/A  
Carriage: N/A  
Clipper: N/A

Framon

Cuts Start At: 404      Cutter: N/A  
Spacing: .0551 / .0826 Alternating  
Block #: N/A      Depth Increment: .0255  
Key Clamping: Key aligned using left side of vice

A-1 Pak-A-Punch™

Quick Change Kit: N/A  
Punch And Die: N/A

ITL

ITL Manufacturer ID: N/A



# KEY CODES

## Toyota, Part 5 50001-69999

**Manufacturer:** Toyota  
**Code Series:** 50001 - 69999

**Key Blanks:**

**Silca:** TOY43AT4

**Number of Cuts:** 10

**M.A.C.S.:** 2

**Key Gauged:** Tip

**Cut to Cut Spacings:**

.0551/.0826 Alternating

**Cut Depth Increments:** .0255

**Spacings (Framon):**

1 - .404

2 - .459

3 - .541

4 - .596

5 - .679

6 - .734

7 - .816

8 - .871

9 - .954

10 - 1.009

**Depths:**

1 = .325

2 = .299

3 = .274

4 = .248

**HPC 1200CMB**

**Code Card:** N/A

**Jaw:** A

**Cutter:** CW-1011

**Gauge From:** Tip

**HPC 1200PCH (Punch):**

**PCH Card:** N/A

**Punch:** N/A

**Jaw:** A

**Silca UnoCode**

**Card Number:** 1420

**HPC CodeMax**

**DSD #:** N/A

**Jaw:** A

**Cutter:** CW-1011

**Curtis No. 15 Code Cutter**

**Cam-Set:** N/A

**Carriage:** N/A

**Framon #2**

**Cuts Start at:** .404

**Cut to Cut Spacing:**

.0551/.0826 Alternating

**Block #:** N/A

**Depth Increments:** .0255

**Cutter:** N/A

**Key Clamping Info:** Key aligned  
using left side of vise/spacing  
clip.

**A-1 Pack-A-Punch**

**Quick Change Kit:** N/A

**Punch:** N/A

**Die:** N/A

**ITL 9000 & 950**

**Manufacturer ID:** N/A

**ECM 200**

**N/A**

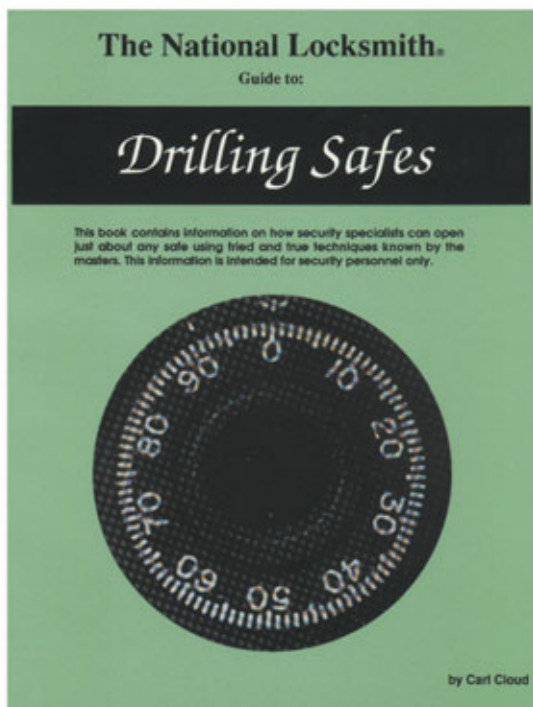


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## Drilling Safes



One of the most expert safemen in the country, Carl Cloud has written a very important book on safe opening.

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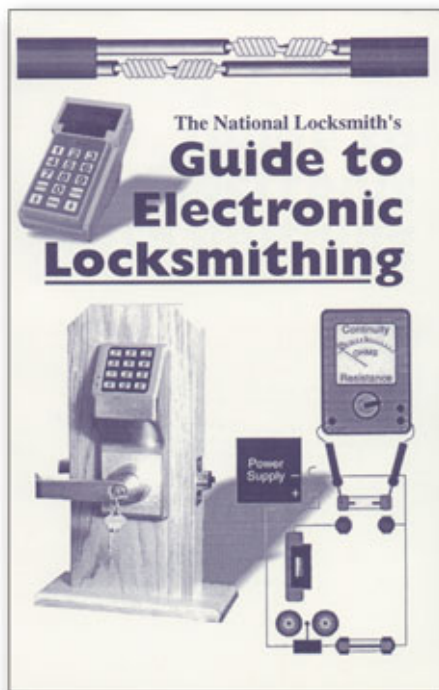
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## Electronic Locksmithing



Everyone knows there's big money in selling, installing and servicing electronic security such as mag locks, electronic strikes, and simple access control.

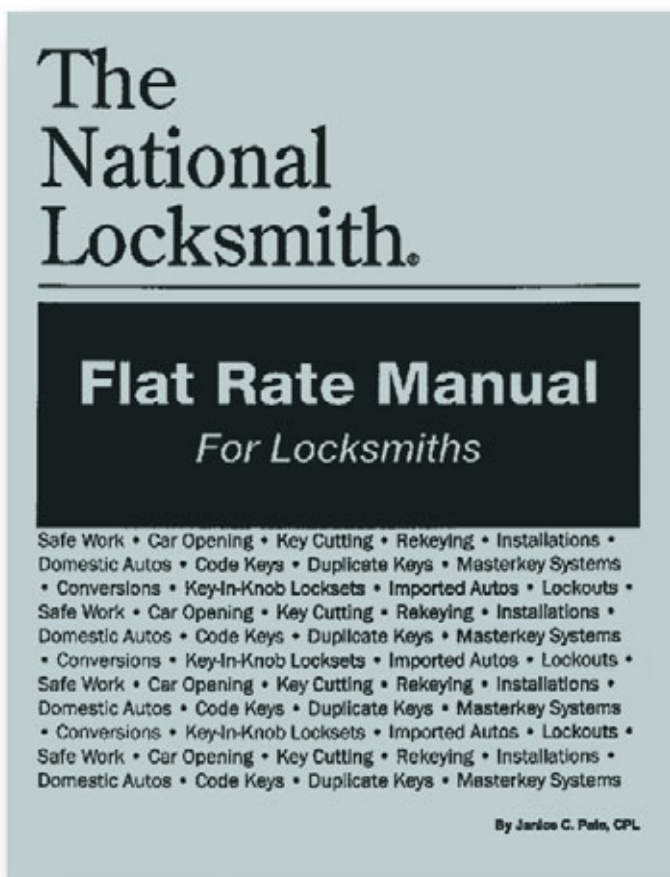
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## Flat Rate Manual



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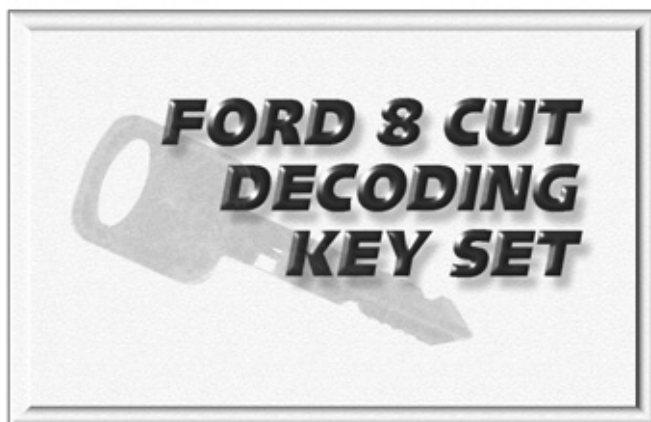
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## Ford 8 Cut Decoding Key Set

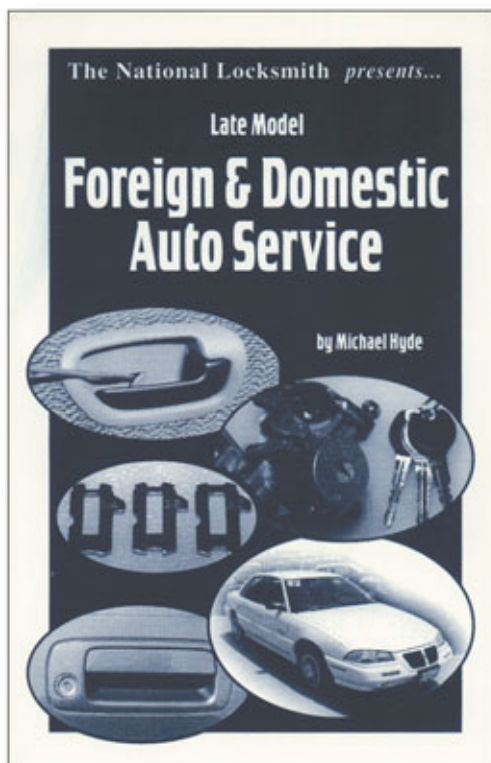


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62990	3222321243	63062	2121343432	63136	1121332132
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63281	1121113244	63355	2312343423	63429	2312213423	63503	3211334312	63577	4311222334		

Continued on  
page 126

Continued from page 124

# Toyota, Part 5

## 50001-69999

63650	3344233223	63724	3443432332	63798	3443213312	63872	2234442134	63946	1244432312	64020	3434332243
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## WEB REVIEW

### Gator Tool Co.

[www.aduxpond.com](http://www.aduxpond.com)

Gator Tool Company's site is fun to navigate, and it's very green....just watch out for alligators!

On the site, you'll get a great description of the company's handy tools, including their automotive face cap removal tool. In fact, in only a moment, a whole slide show loads, demonstrating the steps of using this time saver.

You can read magazine articles about the products online, user testimonials, and of course, you can even order from the site itself. When we checked on the site, there was a free baseball cap offer going on. Just order the "Gator Tool #FCP 042b through the web site, and you get the hat free.

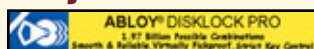


#### A&B Safe Corporation



[www.a-bsafecorp.com](http://www.a-bsafecorp.com)

#### Abloy® DiskLock Pro



[info@abloy.ca](mailto:info@abloy.ca)

#### Adesco Safe Manufacturing Co.



[www.adesco.com](http://www.adesco.com)

#### Adrian Steel



[www.adriansteel.com](http://www.adriansteel.com)

#### Desktop Dispatcher



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#### DiMark International



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#### Discount Safe Co., Inc.



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#### Dynalock Corp.



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#### Herbert L. Flake Co.



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#### HPC, Inc.



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#### Indiana Cash Drawer Co.



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#### International Locking Devices, Ltd.



[www.gatelock.com](http://www.gatelock.com)

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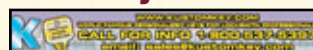
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#### KustomKey



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#### MAG Security



[www.magecurity.com](http://www.magecurity.com)

#### Major Manufacturing



[www.majormfg.com](http://www.majormfg.com)

#### McDonald DASH Locksmith Supply



[www.mcdonaldddash.com](http://www.mcdonaldddash.com)

#### MDS, Inc.



[www.mdsincorporated.com](http://www.mdsincorporated.com)

#### Monaco Lock



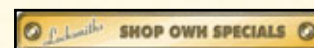
[www.monacolock.com](http://www.monacolock.com)

#### National Auto Lock Service, Inc.



[www.laserkey.com](http://www.laserkey.com)

#### Omaha Wholesale Hardware



[www.omahawh.com](http://www.omahawh.com)

#### SecuraKey



[www.securakey.com](http://www.securakey.com)

#### Select Products Ltd.



[www.select-hinges.com](http://www.select-hinges.com)

#### Sieveling Products Co.



[www.sievelingprodco.com](http://www.sievelingprodco.com)

#### Tech-Train Productions



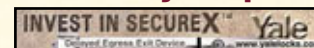
[www.techtrainproductions.com](http://www.techtrainproductions.com)

#### TekTone



[www.tektone.net](http://www.tektone.net)

#### Yale Security Group



[www.yalesecurity.com](http://www.yalesecurity.com)

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## TEST DRIVE!

A-1 Security Manufacturing Corporation produces a wide variety of products, many of which are automotive related. One of my favorites is the PAK-A-PUNCH. I never seem to get enough of this hand held code cutter.

The PAK-A-PUNCH started many years ago as an automotive key machine. It has evolved into a hand held key punch that can originate keys for automotive, interchangeable core (A2 A3 A4), Kwikset and Schlage. It requires no electricity, is portable, compact and accurate.

### PRODUCT:

The PAK-A-PUNCH 3T is the latest model. The unit is designed to code cut most domestic and foreign automotive keys and well as some cylindrical lock keys. The construction consists of an aluminum frame and a steel tower. The tower holds all of the parts used in the actual cutting of the key.

This is a very solid machine with simple construction. It is available as a stand-alone unit or may be purchased in sets to allow the origination of a large variety of keys.

### FEATURES:

There are several nice features built into the PAK-A-PUNCH. The first is the key vice. The vice is designed to slide on and off of the tower. Each vice is constructed of steel that has been designed to securely hold and position one type of key. There are over 50 vices in all.

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## PAK-A-PUNCH 3T

By A1 Security  
Manufacturing Corp.



The vice has notches milled into the bottom. These notches align with a detent to securely position the vice for the proper spacing. With many keys having different spacing requirements, these notches will vary depending on the vice.

The entire tower is raised by a depth knob. Since the tower holds the key vice, this will raise or lower the key in relation to the punch. The punch is in a fixed position. The only thing it can do is slide back and forth when the handle is squeezed.

Punches can be changed quickly. There are a total of six different punches.

The Schlage and Kwikset punches come with their own dies, as well as the 88T automotive punch. These need to be changed as a set. The other three punches can be used with the same die.

To change a punch, the handle is removed by unscrewing a pivot screw with your fingers. With the handle removed, the punch slides out and the new one slides in. Replace the handle and you are back in business.

### CONSTRUCTION:

My favorite feature is the durability of the machine. The

aluminum frame and steel tower should last a lifetime under normal use. There are no weak or flimsy parts. If I dropped this tool, I would continue using it, without fear of it being knocked out of adjustment.

### PRICE:

The price of the PAK-A-PUNCH will vary greatly depending on the accessories purchased. The basic unit is around \$325.00. The punch with a variety of conversion kits can run over \$1000.00.

### CONCLUSION:

If you do a lot of automotive work, this is a great tool to have. To be able to sit in the drivers seat and progress a key for a Ford 10 cut ignition is one heck of a time saver. It is precise, fast, easy to use and well constructed. To create keys quickly and accurately, the PAK-A-PUNCH 3T is very nice to have around.

*For more information contact:  
A-1 Security Mfg. Corp., 3001 West Moore St., Richmond, VA 23230.  
Phone: (877) 725-2121, or (804) 359-9003; Fax: (804) 359-9415;  
E-Mail: [fmcc@demanda1.com](mailto:fmcc@demanda1.com);  
Web: [www.demanda1.com](http://www.demanda1.com).*

TNL

### IN SUMMARY:

**DESCRIPTION:** A hand held code cutting key punch.

**PRICE:** \$325 - \$1000 depending on accessories.

**COMMENTS:** It is precise, fast, easy to use and well constructed.

**TEST DRIVE RESULTS:** This is a great tool to have.